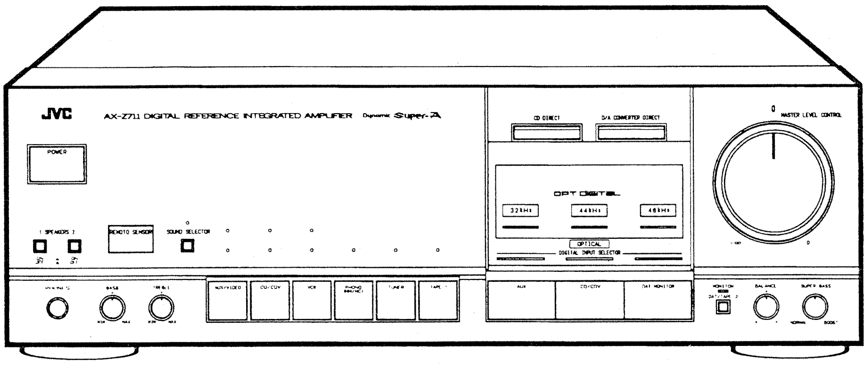
JVC

SERVICE MANUAL

DIGITAL REFERENCE INTEGRATED AMPLIFIER

MODEL No. AX-Z711BK


JVC
AX-Z711 DIGITAL REFERENCE INTEGRATED AMPLIFIER Dynamic Super-A
POWER
1 SPEAKERS 2
REMOTO SENSOR
SOUND SELECTOR
CD DIRECT
D/A CONVERTER DIRECT
OPT DIGITAL
32kHz
44kHz
48kHz
OPTICAL
DIGITAL INPUT SELECTOR
MASTER LEVEL CONTROL
BASS
TREBLE
AUX/VIDEO
CD/CDV
VCR
TUNER
AUX
CD/CDV
DAT MONITOR
MONITOR
BALANCE
SUPER BASS
NORMAL

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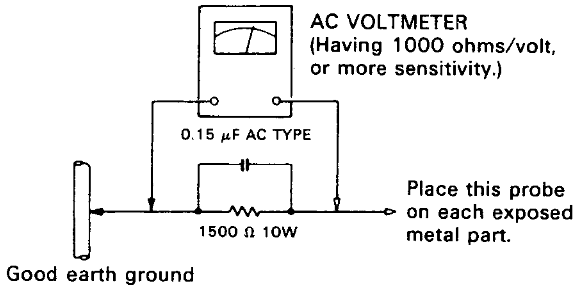
Printed Circuit Board Ass'y	Insertion
Parts List	Separate Volume Insertion

No. 20061
JULY 1988

Safety Precautions

1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alternations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage current check (Electric shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5 mA AC (r.m.s).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 Ω 10 W resistor paralleled by a 0.15 μF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s). This corresponds to 0.5 mA AC (r.m.s).


AC VOLTMETER
(Having 1000 ohms/volt, or more sensitivity.)
0.15 μF AC TYPE
1500 Ω 10W
Place this probe on each exposed metal part.
Good earth ground

Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

SPECIFICATIONS

AUDIO

CIRCUITRY

Preamplifier : High gain phono equalizer for MM/MC cartridge

Power amplifier : "Dynamic Super-A" power amplifier with Gm circuit

OVER ALL CHARACTERISTICS

Output power

100 watts per channel, min. RMS, both channels driven into 8 ohms from 20 Hz to 20 kHz, with no more than 0.007% total harmonic distortion (U.S.A. and Canada only)

100 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz with no more than 0.0007%* total harmonic distortion (U.S.A. and Canada only)

Music power : 180 W per, channel
8 ohm 1 kHz
(U.S.A., Canada only)

100 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz (DIN) (Continental Europe, the U.K, Australia and other areas only)

100 watts 1 kHz, 4 ohm (DIN) (Continental Europe, the U.K. and Australia only)

90 watts per channel min. RMS, both channels driven, into 8 ohms 20 Hz to 20 kHz no more than 0.007% total harmonic distortion (Continental Europe, the U.K., Australia and other areas only)

Total harmonic distortion
: 0.007% (20 Hz – 20 kHz, 8 ohms)
at 100 watts (U.S.A. and Canada only)
at 90 watts (Continental Europe, the U.K., Australia and other areas)

0.0007% (1 kHz)*
at 100 watts (U.S.A. and Canada only)
at 90 watts (Continental Europe, the U.K., Australia and other areas)

(PHONO IN → SP. OUT at volume –30 dB : 0.04% (20 Hz – 20 kHz, 8 ohms)
at 100 watts (U.S.A. and Canada only)
at 90 watts (Continental Europe, the U.K., Australia and other areas)

TECHNISCHE DATEN

AUDIO

SCHALTUNG

Vorverstärker : Phono-Entzerrer hoher Verstärkung für MM/MC-Tonabnehmer

Endverstärker : Gleichspannung-"Super-A" Endverstärker mit Gm Schaltung

TECHNISCHE DATEN

Ausgangsleistung

100 Watt pro Kanal, eff. min. beide Kanäle angesteuert an 8 Ohm, von 20 Hz bis 20 kHz mit nicht mehr als 0,007% Klirrfaktor. (Nur USA und Kanada)

100 Watt pro Kanal, eff. min., beide Kanäle angesteuert an 8 Ohm, bei 1 kHz mit nicht mehr als 0,0007%* Klirrfaktor. (Nur USA und Kanada)

Musikleistung : 180 Wird pro Kanal
8 Ohm 1 kHz
(nur USA und Kanada)

100 Watt pro Kanal, eff. min., beide Kanäle angesteuert an 8 Ohm, bei 1 kHz. (DIN) (Nur für Kontinentaleuropa, Großbritannien, Australien und andere Gebiete)

100 Watt 1 kHz, 4 Ohm (DIN) (Nur für Kontinentaleuropa, Großbritannien und Australien)

90 Watt pro Kanal, min. eff., beide Kanäle ausgesteuert auf 8 Ohm für 20 Hz bis 20 kHz, mit nicht mehr als 0,007% Klirrfaktor (nur Kontinentaleuropa, Großbritannien, Australien und andere Gebiete)

Klirrfakto : 0,007% (20 Hz – 20 kHz, 8 Ohm)
bei 100 Watt (Nur für USA und Kanada)
bei 90 Watt (Kontinental europa, Großbritannien, Australien und andere Gebiete)

0,0007% (1 kHz)*
bei 100 Watt (Nur für USA und Kanada)
bei 90 Watt (Kontinental europa, Großbritannien, Australien und andere Gebiete)

(Plattenspieler-Eingang (PHONO IN) → Lautsp.-Ausgang bei –30 dB Lautstärke) : 0,04% (20 Hz – 20 kHz, 8 Ohm)
bei 100 Watt (Nur für USA und Kanada)
bei 90 Watt (Kontinentaleuropa, Großbritannien, Australien und andere Gebiete)

CARACTERISTIQUES TECHNIQUES

AUDIO

CIRCUITS

Préamplificateur : Egaliseur phono à gain élevé pour cellule MM/MC

Amplificateur de puissance : Amplificateur de puissance "Dynamic Super-A" avec circuit Gm

CARACTERISTIQUES TECHNIQUES D'ENSEMBLE

Puissance de sortie

100 watts par canal, min. RMS, les deux canaux entraînés à 8 ohms de 20 Hz à 20 kHz, avec moins de 0,007% de distorsion harmonique totale. (Etats-Unis et la Canada seulement)

100 watts par canal, min. RMS, les deux canaux entraînés à 8 ohms à 1 kHz avec moins de 0,0007%* de distorsion harmonique totale. (Etats-Unis et la Canada seulement)

Puissance musicale : 180 W par canal
8 ohms 1 kHz
(Etats-Unis, Canada seulement)

100 watts par canal, min. RMS, les deux canaux entrînés, à 8 ohms à 1 kHz (DIN) (Pour Europe continentale, Royaume-Uni, Australie et autres pays seulement)

100 watts 1 kHz, 4 ohms (DIN) (Pour Europe continentale, Royaume-Uni et Australie seulement)

90 watts par canal minimum (valeur efficace), les deux canaux sous 8 ohms, 20 Hz à 20 kHz, distorsion harmonique totale ne dépassant pas 0,007% (Europe continentale, Royaume-Uni, Australie et autres play seulement)

Distorsion harmonique totale
: 0,007% (20 Hz – 20 kHz, 8 ohms)
à 100 watts (Etats-Unis, Canada seulement)
à 90 watts (Europe continentale, Royaume-Unit, Australie et autres Gebiete)

0,0007% (1 kHz)*
à 100 watts (Etats-Unis, Canada seulement)
à 90 watts (Europe continentale, Royaume-Uni, Australie et autres Gebiete)

(PHONO IN → SP. OUT à un volume de –30 dB) : 0,04% (20 Hz – 20 kHz, 8 ohms)
à 100 watts (Etats-Unis, Canada seulement)
à 90 watts (Europe continentale, Royaume-uni, Australie et autres Gerbiete)

Intermodulation distortion
: 0.007% (60 Hz : 7 kHz = 4 : 1, 8 ohms) at 100 watts (U.S.A. and Canada only) at 90 watts (Continental Europe, the U.K., Australia and other areas)

Power band width : 5 Hz – 50 kHz (IHF, 0.05% THD, 8 ohms both channels driven)
Frequency response : 5 Hz to 100 kHz, +0 dB, –3 dB/8Ω
Damping factor : 90 (1 kHz, 8 ohms)
input terminals
Input sensitivity/impedance (1 kHz)
PHONO (MM) : 2.5 mV/47 k ohms
PHONO (MC) : 200 μV/100 ohms
CD/CDV, AUX/ VIDEO, VCR
TAPE 1
DAT/TAPE 2, TUNER : 200 mV/35 k ohms
Signal to noise ratio (66 IHF/78 IHF/DIN)
PHONO (MM) : 86 dB/81 dB/67 dB
PHONO (MC) : 68 dB/73 dB/ –
CD/CDV, AUX/ VIDEO, VCR
TAPE 1
DAT/TAPE 2, TUNER : 101 dB/74 dB/68 dB
Tone control
BASS : ±8 dB 100 Hz
TREBLE : ±8 dB 10 kHz
SUPER BASS : +7 dB 70 Hz (MASTER VOLUME –30 dB)

DIGITAL INPUT/OUTPUT
CD/CDV (OPTICAL) : –23 ~ –14 dBm
AUX : 0.5 Vp-p/75 ohm
DAT REC : 0.5 Vp-p/75 ohm
DAT PLAY : 0.5 Vp-p/75 ohm
D/A CONVERTER SECTION
Sampling frequencies (Auto selection) : 32 kHz, 44.1 kHz, 48 kHz
Total harmonic distortion (1 kHz) : 0.005%
Dynamic range (1 kHz) : 93 dB
Signal-to-noise ratio : 100 dB

EQUALIZER
PHONO overload capacity
PHONO (MM) : 100 mV (1 kHz, 0.02% THD)
PHONO (MC) : 8 mV (1 kHz, 0.04% THD)
PHONO RIAA
Deviation (MM) : ±0.3 dB (20 Hz – 20 kHz)
Deviation (MC) : ±0.5 dB (20 Hz – 20 kHz)
Recording output
Output level/impedance
: 200 mV/600 ohms (Analog input) 2.0 V/600 ohms (Digital input)

*(measured by JVC Audio Analyzer System)

Intermodulations-Verzerrung
: 0,007% (60 Hz : 7 kHz = 4 : 1, 8 Ohm) bei 100 Watt (Nur für USA und Kanada) bei 90 Watt (Kontinentaleuropa, Großbritannien, Australien und andere Gebiete)

Leistungsbandbreite : 5 Hz – 50 kHz (IHF, 0,05% THD Klirrfaktor, beide Kanäle an 8 Ohm ausgesteuert)
Frequenzgang : 5 Hz bis 100 kHz +0 dB, –3 dB/8Ω
Dämpfungsfaktor : 90 (1 kHz, 8 ohm)
Eingangs-Anschlüsse
Eingangs-Empfindlichkeit/Impedanz (1 kHz)
PHONO Magnet (MM) : 2,5 mV/47 k Ohm
PHONO Dynamisch (MC) : 200 μV/100 Ohm
CD/CDV, AUX/ VIDEO, VCR
TAPE 1
DAT/TAPE 2, TUNER : 200 mV/35 k Ohm
Signal/Rauschabstand (66 IHF/78 IHF/DIN)
PHONO Magnet (MM) : 86 dB/81 dB/67 dB
PHONO Dynamisch (MC) : 68 dB/73 dB/ –
CD/CDV, AUX/ VIDEO, VCR
TAPE 1
DAT/TAPE 2, TUNER : 101 dB/74 dB/68 dB
Klangregler
BASS : ±8 dB 100 Hz
TREBLE : ±8 dB 10 kHz
SUPER BASS : +7 dB 70 Hz (MASTER VOLUME –30 dB)

DIGITAL-EINGANG/AUSGANG
CD/CDV-OPTISCH : –23 ~ –14 dBm
: 0,5 Vp-p/75 Ohm
DAT REC : 0,5 Vp-p/75 Ohm
DAT PLAY : 0,5 Vp-p/75 Ohm
D/A-UMSETZERTEIL
Abstatfrequenzen (Autom. Wahl) : 32 kHz, 44,1 kHz, 48 kHz
Klirrfaktor (1 kHz) : 0,005%
Dynamik (1 kHz) : 93 dB
Rauschabstand : 100 dB

ENTZERRER
PHONO-Eingangsempfindlichkeit
PHONO Magnet (MM) : 100 mV (1 kHz, 0,02% Klirrfaktor)
PHONO Dynamisch (MC) : 8 mV (1 kHz, 0,04% Klirrfaktor)
PHONO-RIAA-
Abweichung (MM) : ±0,3 dB (20 Hz – 20 kHz)
Abweichung (MC) : ±0,5 dB (20 Hz – 20 kHz)
Aufnahme-Ausgang
Ausgangspegel/Impedanz
: 200 mV/600 Ohm (Analog Eingangs) 2,0 V/600 Ohm (Digital Eingangs)

*(mit JVC Audio Analyzer System gemessen)

Distorsion d'intermodulation
: 0,007% (60 Hz : 7 kHz = 4 : 1, 8 ohms) à 100 watts (Etats-Unis, Canada seulement) à 90 watts (Europe continentale, Royaume-Uni, Australie et autres Gebiete)

Largeur de gamme puissance
: 5 Hz – 50 kHz (IHF, 0,05% THD, 8 ohms, les deux canaux entraînés)
Résponse en : 5 Hz à 100 kHz, +0 dB, –3 dB/8Ω
Facteur d'amortissement : 90 (1 kHz, 8 ohms)
Bornes d'entrée
Sensibilité d'entrée/impédance (1 kHz)
PHONO (MM) : 2,5 mV/47 k ohms
PHONO (MC) : 200 μV/100 ohms
CD/CDV, AUX/ VIDEO, VCR
TAPE 1
DAT/TAPE 2, TUNER : 200 mV/35 k ohms
Rapports isgnal/bruit (66 IHF/78 IHF/DIN)
PHONO (MM) : 86 dB/81 dB/67 dB
PHONO (MC) : 68 dB/73 dB/ –
CD/CDV, AUX/ VIDEO, VCR
TAPE 1
DAT/TAPE 2, TUNER : 101 dB/74 dB/68 dB
Commande de tonalite
BASS : ±8 dB 100 Hz
TREBLE : ±8 dB 10 kHz
SUPER BASS : +7 dB 70 Hz (MASTER VOLUME –30 dB)

ENTREE/SORTIE NUMERIQUE
CD/CDV (OPTIQUE) : –23 ~ –14 dBm
: 0,5 Vp-p/75 ohms
DAT REC : 0,5 Vp-p/75 ohms
DAT PLAY : 0,5 Vp-p/75 ohms
SECTION CONVERTISSEUR NUMERIQUE/ANALOGIQUE
Fréquences d'échantillonnage (Sélection automatique) : 32 kHz, 44,1 kHz, 48 kHz
Distorsion harmonique totale (1 kHz) : 0,005%
Plage dynamique (1 kHz) : 93 dB
Rapport signal/ bruit : 100 dB

EGALISEUR
Capacité de surcharge PHONO
PHONO (MM) : 100 mV (1 kHz, 0,02% DHT)
PHONO (MC) : 8 mV (1 kHz, 0,04% DHT)
Déviation PHONO RIAA (MM) : ±0,3 dB (20 Hz – 20 kHz)
RIAA (MC) : ±0,5 dB (20 Hz – 20 kHz)
Sortie d'enregistrement
Niveau de sortie/impédance
: 200 mV/600 ohms (analogique d'entrée) 2,0 V/600 ohms (numérique de entrée)

*(mesuré avec le système d'analyseur audio JVC)

VIDEO

INPUT
CDV/AUX/VCR PLAY : 1 Vp-p/75 Ω
OUTPUT
VCR REC/MONITOR OUT : 1 Vp-p/75 Ω (at 1 Vp-p input)
Synchronization : Negative

GENERAL

Dimensions : 435 (W) x 146 (H) x 377 (D) mm 17-3/16" x 5-3/4" x 14-7/8")
Weight : 10.0 kg (22.1 lbs)

Design and specifications subject to change without notice.

VIDEO

EINGANG
CDV/AUX/VCR PLAY : 1 Vp-p/75 Ω
AUSGANG
VCR REC/MONITOR OUT : 1 Vp-p/75 Ω (bei 1 Vp-p Eingang)
Synchronisierung : Negativ

ALLGEMEN

Abmessungen : 435 (B) x 146 (H) x 377 (T)
Gewicht : 10,0 kg

Technische Änderungen vorbehalten!

VIDEO

INPUT
CDV/AUX/VCR PLAY : 1 Vc-c/75 Ω
OUTPUT
VCR REC/MONITOR OUT : 1 Vc-c/75 Ω (à une entrée de 1 Vc-c)
Synchronisation : Négative

GENERALES

Dimensions : 435 (L) x 146 (H) x 377 (P) mm
Poids : 10,0 kg

Présentation et caractéristiques modifiables snas préavis.

POWER SPECIFICATIONS

Areas	Line Voltage & Frequency	Power Consumption
U.S.A.	AC 120 V ∿, 60 Hz	350 watts/460 VA
Canada		
U.K.	AC 240 V ∿, 50 Hz	550 watts
Australia		
Continental Europe	AC 220 V ∿, 50 Hz	250 watts
Other Areas	AC 110 / 120 / 220 / 240 V ∿ selectable, 50/60 Hz	220 watts

SPANNUNGSVERSORGUNG UND LEISTUNGSAUFNAHME

Länder	Netspannung und Frequenz	Leistungsaufnahme
USA	120 V ∿, 60 Hz	350 Watt/460 VA
Kanada		
Großbritannien	240 V ∿, 50 Hz	550 Watt
Australien		
Kontinental-Europa	220 V ∿, 50 Hz	250 Watt
Andere Gebiete	umschaltbar 110 / 120 / 220 / 240 V ∿, 50/60 Hz	220 Watt

CARACTERISTIQUES D'ALIMENTATION

Pays	Tension d'alimentation et fréquence	Consommation
Utats-Unis	CA 120 V ∿, 60 Hz	350 watts/460 VA
Canada		
Royaume-Uni	CA 240 V ∿, 50 Hz	550 watts
Australie		
Europe Continentale	CA 220 V ∿, 50 Hz	250 watts
Autres Pays	CA 110 / 120 / 220 / 240 V ∿ commutable, 50/60 Hz	220 watts

FRONT PANEL
FRONTPLATTE
PANNEAU AVANT

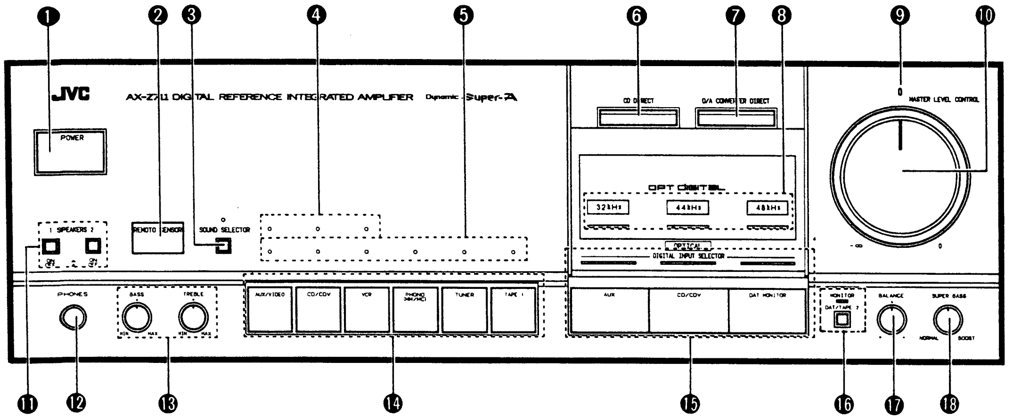


Fig. 3
Abb. 3
Afb. 3

❶ POWER
This is the power ON/OFF button. When the power is switched ON, the sampling frequency display area and one of the source selector indicators will be lit up.

Note:

- **Back up circuit**
  Even if the power is turned off or there is a power failure, the back up circuit will continue to operate and maintain the button settings for about three days. However, after this period has been exceeded the memory circuit will cancel and the button settings will be lost. In this situation press the buttons you want once more.

❷ REMOTE SENSOR
This sensor receives the signal transmitted from the remote control unit. When a signal is being received, the indicator will be lit up.

❸ SOUND SELECTOR
When this button is pressed, the indicator will light, and while the picture signal from the video source, AUX/VIDEO CD/CDV (CDV), VCR remain unchanged, you can swith to another sound source (Audio Signal), using the various input selector buttons.
The picture source will be displayed in the video source display section and the sound source will be displayed in one of the source indicators.
Refer to page 29 for details.

❹ VIDEO SOURCE INDICATOR SECTION
The video source selected by the input selector buttons will be displayed here.
LEFT SIDE INDICATOR: This indicator will be lit up when either the AUX/VIDEO button in the ANALOG INPUT SELECTOR section or the AUX button in the DIGITAL INPUT SELECTOR section is selected.

❶ Netzschalter (POWER)
Diese Taste zum Ein/Ausschalten der Netzspannung betätigen. Bei Drücken der Netzschaltertaste leuchtet die Schaltfrequenzanzeige und eine der Signalquellenwähler-Anzeigen auf.

Hinweis:

- **Speicherstützschaltung**
  Auch nach ausschalten der Netzspannung oder bei stromausfall erhält die Speicherstützschaltung die Werte der Tasteneinstellung etwa drei Tage lang. Danach wird die Speicherstützschaltung den Speicherinhalt allerdings löschen, so daß die Tasteneinstellungen verloren sind. Die gewünschten Tasten sind dann noch einmal zu betätigen.

❷ Fernbedienungssensor (REMOTE SENSOR)
Dieser Sensor empfängt das von der Fernbedienungseinheit gesendete Signal. Bei Signalempfang leuchtet die Anzeigelampe auf.

❸ Tonquellenwahl (SOUND)
Bei Tastendruck leuchtet die Anzeigelampe auf. Während das Bildsignal von der Videosignalquelle, AUX/VIDEO, CD/CDV (CDV), VCR unverändert ethalten bleibt, können Sie nunmit den jeweiligen Eingangssignal-Wahltasten auf eine andere Tonquelle (Audiosignal) umschalten.
Die Bildsignalquelle wird mit der Bildquellenanzeige dargestellt, die Tonquelle mit einer der Tonquellenanzeigen.
Weiteres siehe Seite 29.

❹ Bildquellen-Anzeigefeld (VIDEO SOURCE)
Die mit den Eingangssignal-Whaltasten gewählte Bildquelle wird hier dargestellt.
Anzeige links: Diese Lampe leuchtet auf, wenn entweder die AUX/VIDEO-Taste des Analogeingangswählers (ANALOG INPUT SELECTOR) gewählt ist oder aber die AUX-Taste des Digitaleingangswählers (DIGITAL INPUT SELECTOR).

❶ Interrupteur d'alimentation (POWER)
Il permet la mise sous tension ou hors tension (ON/OFF). Lorsque l'appareil est mis sous tension (ON), la zone d'affichage de fréquence de discrimination et l'un des indicateurs de sélecteur de source seront allumés.

Remarque:

- **Circuit de secours (BACK UP CIRCUIT)**
  Même si l'alimentation est coupée ou en cas de panne d'électricité, le circuit de secours (BACK UP CIRCUIT) continue à fonctionner et à maintenir le réglage de touches pendant environ trois jours. Cependant, au-delà de cette période, le circuit de mémoire annule le réglage de touches. En ce cas, appuyer de nouveau sur les touches désirées.

❷ Détecteur de télécommande (REMOTE SENSOR)
Ce détecteur reçoit le signal transmis du boîtier de télécommande. Pendant qu'un signal est reçu, le témoin reste allumé.

❸ Sélecteur de son (SOUND SELECTOR)
Lorsque cette touche est enfoncée, le témoin sera allumée. Pendant que le signal d'image de la source vidéo, des bornes auxiliaires (AUX/VIDEO), de la borne de lecture de disques compacts/lecteur de disques compacts vidéo (CD/CDV) (lecteur de disques compacts) (CDV) et de la borne de magnétoscope (VCR) reste inchangé, il est possible de passer à une autre source sonore (signal audio) (Audio Signal) à l'aide des diverses touches de sélecteur d'entrée.
La source d'image sera affichée dans la zone d'affichage de source vidéo, tandis que la source de son sera affichée dans l'un des indicateurs de source.
Se référer à la page 29 pour plus de détails.

❹ Zone d'indicateur de source vidéo (VIDEO SOURCE INDICATOR SECTION)
La source vidéo sélectionnée par les touches de sélecteur d'entrée sera affichée ici.
Indicateur côté gauche (LEFT SIDE INDICATOR): Cet indicateur sera allumée lorsque la touche AUX/VIDEO de la zone de sélecteur d'entrée analogique (ANALOG INPUT SELECTOR) ou la touche AUX de la zone de sélecteur d'entrée numérique (DIGITAL INPUT SELECTOR) est sélectionnée.

CENTER INDICATOR: This indicator will turn on when either the CD/CDV button in the ANALOG INPUT SELECTOR section or the CD/CDV button in the DIGITAL INPUT SELECTOR section is selected.

RIGHT SIDE INDICATOR: This indicator will come on when the VCR button in the ANALOG INPUT SELECTOR section is selected.

❺ **AUDIO SOURCE INDICATOR SECTION**
When an analog audio source is selected corresponding to the ANALOG INPUT SELECTOR buttons, the source will be displayed in this section.

❻ **CD DIRECT**
When this button is pressed the indicator will be lit and a CD or a CDV signal from a unit connected to the ANALOG CD/CDV terminal will be input directly (Shortest signal route) into the MASTER LEVEL CONTROL section of the amplifier. Very high grade HiFi sound results.

❼ **D/A CONVERTER DIRECT**
When this button is pressed the indicator will be lit and the signal from a unit such as a CD/CDV or DAT deck, connected to the DIGITAL input terminals will be input directly (Shortes signal route) into the MASTER LEVEL CONTROL section of the amplifier, after DIGITAL ANALOG processing. Very high grade HiFi performance is achieved.

❽ **SAMPLING FREQUENCY indicator**
The sampling frequency will be automatically displayed in response to a digital signal input.

❾ **VOLUME indicator**
This indicator will blink when the MASTER LEVEL or MUTE buttons on the REMOTE CONTROL unit are being operated.

❿ **MASTER LEVEL CONTROL**
This knob is used to adjust the level of sound from the speakers or headphones.

⓫ **SPEAKERS**
These are the ON (▬)/OFF (■) buttons for speakers 1 and 2.

⓬ **PHONES**
The headphones (Impedance 6 ohms ~ 1k ohms) can be plugged in here.

⓭ **TONE CONTROL**
BASS: Use this knob to adjust the low frequency characteristics.
TREBLE: Use this knob to adjust the high frequency characteristics.

Anzeige Mitte: Diese Lampe leuchtet auf, wenn entweder die CD/CDV-Taste des Analogeingangswählers (ANALOG INPUT SELECTOR) gewählt ist oder aber die CD/CDV-Taste des Digitaleingangswählers (DIGITAL INPUT SELECTOR).

Anzeige rechts: Diese Lampe leuchtet auf, wenn die VCR-Taste (Videorecorder) des Analogeingangswählers (ANALOG INPUT SELECTOR) gewählt ist.

❺ **Tonquellen-Anzeigefeld (AUDIO SOURCE)**
Wenn mit den entsprechenden ANALOG INPUT SELECTOR-Tasten eine Analogtonquelle gewählt ist, wird diese Signalquelle in diesem Feld angezeigt.

❻ **CD DIRECT**
Wenn diese Taste gedrückt wird, leuchtet die Anzeige auf, und ein Signal von einem an die ANALOG CD/CDV-Anschlußbuchse angeschlossenen Gerät wird direkt (kürzester Signalweg) in den MASTER LEVEL CONTROL-Bereich des Verstärkers gespeist. Durch dieses Verfahren wird Hifi-Klang höchster Qualität erzielt.

❼ **D/A CONVERTER DIRECT**
Wenn diese Taste gedrückt wird, leuchtet die Anzeige auf, und ein Signal von einer an die DIGITAL-Buchse angeschlossenen Komponente (wie z.B. CD/CDV order DA-Deck) wird nach der DIGITAL/ANALOG-Umsetzung direkt in den MASTER LEVEL CONTROL-Bereich des Verstärkers gespeist. Durch dieses Verfahren wird Hifi-Klang höchster Qualität erzielt.

❽ **Schaltfrequenzanzeige (SAMPLING FREQUENCY)**
Nach Eingang eines Digitalsignals wird die Schaltfrequenz in diesem Feld angezeigt.

❾ **Lautstärkeanzeige (VOLUME indicator)**
Diese Anzeige blinkt, wenn die Tasten MASTER LEVEL oder MUTE auf der Fernbedienungseinheit (REMOTE CONTROL) betätigt werden.

❿ **MASTER LEVEL CONTROL**
Dieser Knopf dient der Lautstärkeregelung für die Lautsprecher oder Kopfhörer.

⓫ **Lautsprecher (SPEAKERS)**
Die Lautsprecher 1 und 2 werden mit diesen ON (▬)/OFF (■)-Tasten geschaltet.

⓬ **Kopfhörer (PHONES)**
Hieran werden die Kopfhörer (Impedanz 6 Ohm ~ 1 kOhm) angeschlossen.

⓭ **Klangregler (TONE CONTROL)**
BASS: Zur Verstellung der Toncharakteristiken im niedrigen Frequenzbereich.
TREBLE: Zur Verstellung der Toncharakteristiken im hohen Frequenzbereich.

Indicateur côté central (CENTER INDICATOR): Cet indicateur sera allumée lorsque la touche CD/CDV de la zone de sélecteur d'entrée analogique (ANALOG INPUT SELECTOR) ou de la zone de sélecteur d'entrée numérique (DIGITAL INPUT SELECTOR) est sélectionnée.

Indicateur côté droite (RIGHT SIDE INDICATOR): Cet indicateur sera allumée lorsque la touche VCR de la zone de sélecteur d'entrée analogique (ANALOG INPUT SELECTOR) est sélectionnée.

❺ **Zone d'indicateur de source audio (AUDIO SOURCE INDICATOR SECTION)**
Lorsqu'une source audio analogique est sélecionnée à l'aide des touches de sélecteur d'entrée analogique (ANALOG INPUT SELECTOR), la source sera affichée dans cette zone.

❻ **CD DIRECT**
Lorsque cette touche est enfoncée, l'indicateur sera allumé, et un signal de disque compact (CD) ou de disque compact vidéo (CDV) d'un appareil raccordé à la borne (ANALOG) CD/CDV sera entré directement (par l'itinéraire de signal le plus court) dans la zone de commande de niveau sonore principal (MASTER LEVEL CONTROL) de l'amplificateur. Il en résulte le son de haute fidélité de niveau très élevé.

❼ **D/A CONVERTER DIRECT**
Lorsque cette touche est enfoncée, l'indicateur sera allumé, et le signal d'un appareil tel que CD/CDV ou l'enregistreur audio-numérique (DAT deck) raccordé aux bornes d'entrée numériques (DIGITAL) sera entré directement (par l'itinéraire de signal le plus court) dans la zone de commande de niveau sonore principal (MASTER LEVEL CONTROL) de l'amplificateur après le traitement numérique/analogique (DIGITAL/ANALOG).
Il en résulte le son de haute fidélité de niveau très élevé.

❽ **Indicateur de fréquence de discrimination**
La fréquence de discrimination sera automatiquement affichée en répondant à l'entrée d'un signal numérique.

❾ **Indicateur de volume**
Cet indicateur se met à clignoter lorsque les touches de niveau sonore principal (MASTER LEVEL) ou de réglage silencieux (MUTE) du boîtier de télécommande (REMOTE CONTROL) sont en fonction.

❿ **Commande de niveau sonore principal (MASTER LEVEL CONTROL)**
Cette commande est utilisée pour régler le volume des haut-parleurs ou du casque d'écoute.

⓫ **Haut-parleurs (SPEAKERS)**
Ces touches permettent la mise en circuit (ON (▬)) ou la mise hors circuit (OFF (■)) des haut-parleurs 1 et 2.

⓬ **Prise de casque d'écoute (PHONES)**
Le casque d'écoute (impédance de 6 ohms à 1 k ohms) peut être branché à cette prise.

⓭ **Contrôle de tonalité (TONE CONTROL)**
Graves (BASS): Utiliser cette touche pour régler les caractéristiques de basse fréquence.
Aigus (TREBLE): Utiliser cette touche pour régler les caractéristiques de haute fréquence.

⑭ ANALOG INPUT SELECTOR SECTION

With these buttons you can select to analog type sound and picture signals.

When a source button is pressed, the indicator in the area above the button will turn on.

AUX/VIDEO: Press to select an analog sound and picture signal from a unit such as a Video disc player.

CD/CDV: Press to play a CD or receive a CDV picture.

VCR: Press to receive the sound and picture from a VIDEO deck.

PHONO (MM/MC): Press to listen to sounds from a phonograph.

TUNER: Press to listen to a broadcast.

TAPE 1: Press to listen to a tape of a unit such as a tape deck.

⑮ DIGITAL INPUT SELECTOR SECTION

With these buttons you can select digital type sound and picture signals.

When a DIGITAL INPUT SELECTOR button is pressed the indicator in the area above the button and an indicator in the VIDEO SOURCE INDICATOR section will turn on.

AUX: Press to select a digital sound and picture signal from a unit such as a CD/CDV unit.

CD/CDV: Press to receive an optical digital sound and picture output from a CD/CDV unit.

DAT MONITOR: Press to receive a digital sound signal from a DAT unit. (In this situation the picture signal can be selected by pressing AUX or CD/CDV)

⑯ DAT/TAPE 2 MONITOR

This can be used to monitor the audio from a DAT deck or TAPE deck connected to the DAT/TAPE 2 terminal or from a SEA GRAPHIC EQUALIZER. When this button is pressed the monitor indicator will be lit. Press the button once again to cancel.

⑰ BALANCE

This knob adjusts the balance between the left and right speakers. Normally it is set to the center. (When CD DIRECT, D/A CONVERTER DIRECT are being used, this knob will not operate.

⑱ SUPER BASS

When sound volume is turned down, the human ear tends to become less aware of bass sound. At low sound levels the SUPER BASS knob can be used to emphasize the bass sound.

For ordinary use, the knob should be set to the NORMAL position.

⑭ ANALOG INPUT SELECTOR-Feld

Mit diesen Tasten wählen Sie zwischen analogen Ton- und Bildsignalquellen.

Bei Druck auf eine Signalquellentaste leuchtet die Anzeige über der Taste auf.

AUX/VIDEO: Zur Wahl eines analoges Ton- und Bildsignals von beispielsweise einem Bildplattenspieler.

CD/CDV: Für Wiedergabe einer CD-Platte oder Empfang eines CDV-Bilds.

VCR: Für Empfang von Ton und Bild eines VIDEO-Decks.

PHONO (MM/MC): Für Wiedergabe einer Schallplatte.

TUNER: Zum Anhören von Rundfunksendungen

TAPE 1: Zur Wiedergabe eines Tonbandaufnahme (z.B. von einem Kassettendeck).

⑮ DIGITAL INPUT SELECTOR-Feld

Mit diesen Tasten wählen Sie zwischen digitalen Ton- und Bildsignalquellen.

Bei Druk auf eine DIGITAL INPUT SELECTOR-Taste leuchtet die Anzeige über der Taste und eine Anzeigelampe im VIDEO SOURCE INDICATOR-Feld auf.

AUX: Zur Wahl eines digitales Ton- und Bildsignals von beispielsweise einem CD/CDV-Gerät.

CD/CDV: Für die Wiedergabe eines optodigitalen Signals von einem CD/CDV-Gerät.

DAT MONITOR: Für Empfang eines digitalen Tonsignals von einem DA-Tonbandgerät. (Dabei kann das Bildsignal durch Betätigen von AUX oder CD/CDV gewählt werden.)

⑯ DAT/TAPE 2 MONITOR

Zur Klangkontrolle eines SEA GRAPHIC EQUALIZER oder eines DA-Tonbandgeräts (DAT) oder Kassettendecks (TAPE), das an die DAT/TAPE 2-Buchsen angeschlossen ist. Bei Tastendruck leuchtet die Monitoranzeige auf. Erneuter Tastendruck hebt die Funktion wieder auf.

⑰ BALANCE

Zur Balancekorrektur zwischen den Lautsprechern rechts und links. Normalerweise in der Mittenposition lassen. (Bei Betrieb von CD DIRECT oder D/A CONVERTER DIRECT bleibt diese Taste unwirksam.)

⑱ SUPER BASS

Bei geringer Lautstärke ist das menschliche Ohr Bässen gegenüber weniger empfindsam. Die SUPER BASS-Taste dient also dazu, Bässe bei geringem Lautstärkepegel anzuheben. Im Normalfall sollte die Taste auf NORMAL stehen.

⑭ Zone de sélecteur d'entrée analogique (ANALOG INPUT SELECTOR SECTION)

A l'aide de ces touches, il est possible de sélectionner les signaux de son et d'image de type analogique.

Lorsqu'une touche de source est enfoncée, le témoin de la zone au-dessus de la touche s'allume.

AUX/VIDEO: Appuyer sur cette touche pour choisir un son et un signal d'image analogiques depuis un appareil tel que lecteur de disque vidéo.

CD/CDV: Appuyer sur cette touche pour lire un disque compact (CD) ou pour recevoir une image de disque compact vidéo (CDV).

VCR: Appuyer sur cette touche pour recevoir le son et l'image depuis un enregistreur vidéo (VIDEO deck).

PHONO (MM/MC): Appuyer sur cette touche pour écouter les sons d'un phonographe.

TUNER: Appuyer sur cette touche pour écouter une émission.

TAPE 1: Appuyer sur cette touche pour écouter une bande d'un appareil tel que la magnétocassette.

⑮ Zone de sélecteur d'entrée numérique (DIGITAL INPUT SELECTOR SECTION)

A l'aide de ces touches, il est possible de sélectionner les signaux de son et d'image de type analogique.

Lorsqu'une touche de sélecteur d'entrée numérique (DIGITAL INPUT SELECTOR) est enfoncée, le témoin de la zone au-dessus de la touche et le témoin de la zone d'indicateur de source vidéo (VIDEO SOURCE INDICATOR) s'allument.

AUX: Appuyer sur cette touche pour choisir un son et un signal d'image numériques depuis un appareil tel que lecteur de disque audionumérique/disque audionumérique vidéo (CD/CDV).

CD/CDV: Appuyer sur cette touche pour recevoir une sortie de son et d'image numérique optique d'un lecteur de disques compacts et de disques compacts vidéo (CD/CDV).

DAT MONITOR: Appuyer sur cette touche pour recevoir un signal de son numérique d'un magnétophone audionumérique. (Dans ce cas, il est possible de sélectionner le signal d'image en appuyant sur la touches AUX ou CD/CDV.)

⑯ Contrôle de magnétophone audionumérique/bande 2 (DAT/TAPE 2)

Cette touche peut être utilisée pour contrôler le son de l'enregistreur audionumérique ou de la magnétocassette raccordé(e) à la borne magnétophone audionumérique/bande 2 (DAT/TAPE 2) ou le son de l'égaliseur graphique SEA (SEA GRAPHIC EQUALIZER). Lorsqu'on appuie sur cette touche, l'indicateur de contrôle s'allume. Appuyer de nouveau sur cette touche pour annuler le contrôle.

⑰ Balance (BALANCE)

Ce bouton permet de régler la balance entre les haut-parleurs de gauche et de droite.

Normalement, il est placé sur la position centrale. (Pendant que le bouton CD DIRECT, D/A CONVERTER DIRECT est utilisé, ce bouton ne fonctionne pas.)

⑱ SUPER BASS

Lorsque le volume de son est réduit, les oreilles humaines ont tendance à devenir plus sensibles aux basses. Au niveau sonore réduit, il est possible d'utiliser ce bouton pour accentuer les basses.

Pour utilisation ordinaire, ce bouton doit être mis sur la position normale (NORMAL).

HOW TO OPERATE
BEDIENUNG
UTILISATION
BEDIENING
COMO SE OPERA
ANVÄNDNING

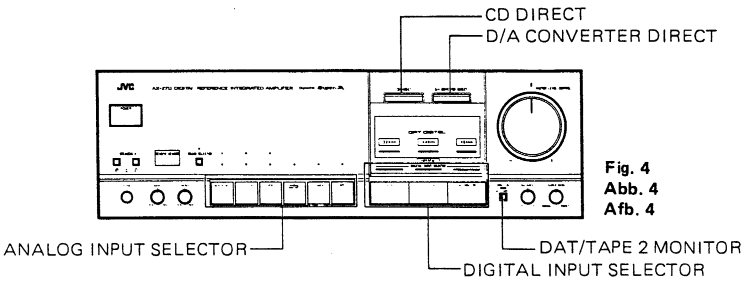


Fig. 4
Abb. 4
Afb. 4

Turn the MASTER LEVEL CONTROL knob down before turning on the power.
Connect tuner and video units to their respective terminals in accordance with the diagram, showing connections, on page 5.

Fig. 5
Abb 5
Afb. 5

Drehen Sie den MASTER LEVEL CONTROL-Knopf herunter, bevor Sie den Netzstrom einschalten.
Schließen Sie den Tuner und die Video-Komponenten an die entsprechenden Buchsen an, wie im Anschlußdiagramm auf Seite 5 gezeigt.

Abaisser le bouton de contrôle de niveau sonore principal (MASTER LEVEL CONTROL) avant de fournir l'alimentation.
Raccorder le syntoniseur et les apareils vidéo à leurs bornes respectives suivant le shéma de page 5 indiquant les raccordements.

What have you selected? (Sound·Picture) Was haben Sie gewählt? (Ton·Bild) Qu'avez-vous sélectionné? (Son·Image)			Names of switches to be operated Namen der zu betätigenden Schalter Désignation des touches à utiliser		
			ANALOG INPUT SELECTOR	DIGITAL INPUT SELECTOR	DAT/TAPE 2 MONITOR
RECORD (Turntable, Plattenspieler, Tourne-disque)			PHONO (MM/MC)	–	OFF
CD/CDV	OUTPUT	OPTICAL DIGITAL	–	CD/CDV or AUX	
		ANALOG	CD/CDV or AUX/VIDEO	–	
FM/AM Braodcast FM/AM-Rundfunksendungen Emmission en FM/AM			TUNER	–	
VIDEO (Hi-Fi VIDEO)			VCR	–	
Video disc Bildplatte Disque vidéo			AUX/VIDEO		
TAPE BAND BANDE	OUTPUT	COAXIAL DIGITAL DAT	–	DAT MONITOR	
		ANALOG TAPE 1	TAPE 1	–	
		ANALOG DAT/TAPE 2	–	–	ON

CD DIRECT switch
When this switch is operated, the CD/CDV analog signal is input directly into the MASTER LEVEL CONTROL circuit and the source selector circuit and balance selector circuit are by-passed. Very clear and high fidelity performance is achieved. Accordingly, when the CD DIRECT function is ON, the ANALOG recording and the BALANCE functions will not operate.

D/A CONVERTER DIRECT switch
This switch can be operated when a digital signal is being received.
The D/A CONVERTER (DIGITAL ANALOG CONVERTER) output will take the same route as in the case of the CD DIRECT signal, to the MASTER LEVEL CONTROL circuit and very clear and high fidelity performance is achieved. Accordingly, when the D/A CONVERTER DIRECT function is ON, ANALOG recording and the BALANCE functions will not operate.

CD DIRECT-Schalter
Wenn Sie disen Schalter betätigen, wird das CD/CDV-Analogsignal direkt vom MASTER LEVEL CONTROL-Schaltkreis aufgenommen, wobei Balance-Schaltkreis und Signalquellenwahl-Schaltkreis umgangen werden und somit höchste Hifi-Klangqualität gewährleistet ist. Wenn die CD DIRECT-Funktion eingeschaltet (ON) ist, sind ANALOG-Aufnahmefunktion und Balancereglerfunktion also nicht aktiv.

D/A CONVERTER DIRECT-Schalter
Wenn Sie diesen Schalter betätigen, ist das Gerät empfangsbereit für Digitalsignale. Das Ausgangsignal des D/A CONVERTER (Digital/Analog-Umsetzer) wird dann direkt vom MASTER LEVEL CONTROL-Schaltkreis übernommen, wobei Balance-Schaltkreis und Signalquellenwahl-Schaltkreis umgangen werden. Der D/A CONVERTER-Ausgang (Digital-Analog-Umsetzer) liegt direkt am MASTER LEVEL CONTROL an, wodurch höchste Hifi-Klangqualität gewährleistet ist. Wenn die D/A CONVERTER DIRECT-Funktion eingeschaltet (ON) ist, sind ANALOG-Aufnahmefunktion und Balancereglerfunktion also nicht aktiv.

Commutateur direct de disques compacts (CD DIRECT)
Lorsque ce commutateur est manipulé, le signal analogique de disques compacts/disques compacts vidéo (CD/CDV) est directement entrée dans le circuit de contrôle de niveau sonore principal (MASTER LEVEL CONTROL), et le circuit de sélecteur de source et le circuit de sélecteur de balance sont ignorés. La reproduction sonore de très haute fidélité est ainsi réalisée. Par conséquent, lorsque la touche CD DIRECT est sur la position marche (ON), l'enregistrement analogique (ANALOG) et la commande de balance (BALANCE) ne s'effectuent pas.

Commutateur direct de convertisseur numérisque-analogique (D/A CONVERTER)
Ce bouton peut être utilisé pendant qu'un signal numérique est reçu. La sortie du convertisseur numérisque-analogique (D/A CONVERTER) passe par le même itinéraire que dans le cas du niveau sonore principal (MASTER LEVEL CONTROL). Par conséquent, lorsque la touche D/A CONVERTER DIRECT est sur la position marche (ON), l'enregistrement analogique (ANALOG) et la commande de balance (BALANCE) ne s'effectuent pas.

AUDIO AND VIDEO RECORDING

Choose either an analog or a digital source that can be heard through the speakers. In this situation a deck connected to TAPE 1, DAT/ TAPE 2 and VCR, REC terminals can receive a recording signal and recording is possible.
In the case of video recording the picture signal will be output from the VIDEO VCR REC terminals and with a television (Monitor) connected to the MONITOR OUT terminal, monitoring is possible.

- When monitoring a recording by a 3 HEAD DECK, the deck should be connected to the DAT/TAPE 2 terminals and the DAT/ TAPE 2 MONITOR switch should be ON.
- Recording level is adjusted from the tape deck, not from the MASTER LEVEL CONTROL.
- A signal from an analog source cannot be recorded with a DAT deck connected to the DIGITAL terminals.
- For recording, the CD DIRECT ❻ and D/A CONVERTER DIRECT ❼ should be OFF.

AUFNAHME

Verwenden Sie eine Analog- oder Digital-Signalquelle, die über die Lautsprecher zu hören ist. Ein Kassettendeck, das an die REC-Anschlußbuchsen von entweder TAPE 1, DAT/ TAPE-2 oder Videorecorder (VCR) angeschlossen ist, kann ein Aufnahmesignal empfangen und ermöglicht damit die Aufnahme.
Bei Bildaufnahmen wird das Bildsignal über die VIDEO VCR REC-Buchsen ausgegeben; mit einem an die MONITOR OUT-Buchse angeschlossenen Fernsehgerät (Monitor) ist Bildkontrolle möglich.

- Wenn die Aufnahme auf ein 3-TONKOPF-KASSETTENDECK mit der Monitor-Funktion überwacht werden soll, sollte das Kassettendeck an die DAT/TAPE 2-Anschlußbuchsen angeschlossen und der DAT/ TAPE 2 MONITOR-Schalter eingeschaltet (ON) sein.
- Der Aufnahmepegel wird vom Kassettendeck her ausgesteuert, nicht von MASTER LEVEL CONTROL.
- Das Signal von einer Analogquelle läßt sich mit einem an die DIGITAL-Buchsen angeschlossenen DA-Tonbandgerät nicht aufnehmen.
- Bei Aufnahmen sollten CD DIRECT ❻ und D/A CONVERTER DIRECT ❼ ausgeschaltet sein.

ENREGISTREMENT AUDIO ET VIDEO

Choisir une source analogique ou numérique qui peut être écoutée à travers les haut-parleurs. Dans ce cas, une platine raccordée aux bornes d'enregistrement de la bande 1 (TAPE 1), du magnétophone audionumérique/bande 2 (DAT/ TAPE 2) ou du magnétoscope (VCR) peut recevoir un signal d'enregistrement, permettant ainsi l'enregistrement.
Dans le cas de l'enregistrement vidéo, le signal d'image sera sorti des bornes VIDEO VCR REC. Il est possible d'effectuer le contrôle à l'aide d'un téléviseur (moniteur) raccordé à la borne MONITOR OUT.

- Pour contrôler l'enregistrement à l'aide d'une platine d'enregistrement à trois têtes (3 HEAD DECK), celle-ci doit être raccordée aux bornes DAT/TAPE 2, et les commutateurs DAT/TAPE 2 MONITOR doivent être sur la position marche (ON).
- Le niveau d'enregistrement est réglé depuis la platine d'enregistrement, et non pas depuis la commande de niveau sonore principal (MASTER LEVEL CONTROL).
- Le signal d'une source analogique ne peut pas être enregistré par un enregistreur audionumérique (DAT deck) raccordé aux bornes numériques (DIGITAL).
- Pour effectuer l'enregistrement, les touches CD DIRECT ❻ et D/A CONVERTER DIRECT ❼ doivent être sur la position arrêt (OFF).

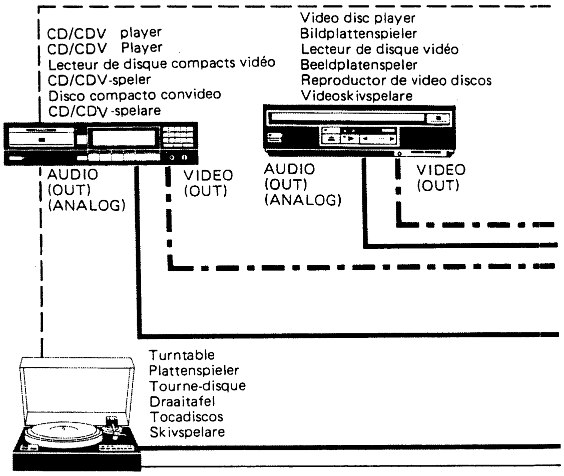
What combination of components do you have? Wie sind Ihre Anlagenbauteile zusammengestellt? Quelle combinaison des appareils avez-vous?		Names of switches to be operated Namen der zu betätigenden Schalter Désignation des touches à tuiliser	
PLAY SIDE → RECORDING SIDE WIEDERGABESEITE → AUFNAHMESEITE COTE LECTURE → COTE ENREGISTREMENT		ANALOG/DIGITAL INPUT SELECTOR	DAT/TAPE 2 MONITOR
DIGITAL → DIGITAL		Digital recording cannot be performed from a CD/CDV software or a source having a code which prohibits copying. Digitalaufnahmen sind nicht möglich, wenn die CD/CDV-Software einen Kopierschutzcode enthält. L'enregistrement numérique ne peut pas être effectué depuis un logiciel de disques compacts/disques compacts vidéo (CD/CDV) ou depuis une source comportant un code qui interdit la copie.	
CD/CDV (OPTICAL)	DAT (COAXIAL)		
AUX (COAXIAL)	DAT (COAXIAL)	AUX (DIGITAL INPUT SELECTOR)	–

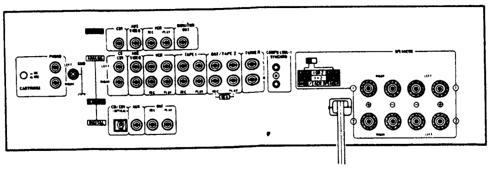
Fig. 7
Abb. 7
Afb. 7

What combination of components do you have? Wie sind Ihre Anlagenbauteile zusammengestellt? Quelle combinaison des appareils avez-vous?		Names of switches to be operated Namen der zu betätigenden Schalter Désignation des touches à tuiliser	
PLAY SIDE → RECORDING SIDE WIEDERGABESEITE → AUFNAHMESEITE COTE LECTURE → COTE ENREGISTREMENT		ANALOG/DIGITAL INPUT SELECTOR	DAT/TAPE 2 MONITOR
DIGITAL → ANALOG		Using the DIGITAL INPUT SELECTOR buttons, choose the source you wish to record. Wählen Sie die aufzunehmende Signalquelle mit den DIGITAL INPUT SELECTOR-Tasten. A l'aide des touches DIGITAL INPUT SELECTOR, choisir la source désirée pour enregistrement.	–
CD/CDV (OPTICAL) AUX/VIDEO (COAXIAL) DAT (COAXIAL)	TAPE 1		
CD/CDV (OPTICAL) AUX/VIDEO (COAXIAL)	DAT/TAPE 2	Using the DIGITAL INPUT SELECTOR buttons, choose the source you wish to record. Wählen Sie die aufzunehmende Signalquelle mit den DIGITAL INPUT SELECTOR-Tasten. A l'aide des touches DIGITAL INPUT SELECTOR, choisir la source audio ou vidéo désirée pour enregistrement.	– (Monitoring is possible when ON.) (Kontrollbetrieb möglich, wenn auf ON.) (Le côntrole est possible lors de la position marche (ON).)
DAT (COAXIAL)	DAT/TAPE 2	Recording is not possible. Aufnahme ist nicht möglich. L'enregistrement n'est pas possible.	
CD/CDV (OPTICAL) AUX/VIDEO (COAXIAL) DAT (COAXIAL)	VCR	Using the DIGITAL INPUT SELECTOR buttons, choose the audio or video source you wish to record. *With the SOUND SELECTOR function you can combine a video picture with a different sound. (See p.29) Wählen Sie die aufzunehmende Ton- oder Bildsignalquelle mit den DIGITAL INPUT SELECTOR-Tasten. *Mit der SOUND SELECTOR-Funktion kann das Bild mit einer unabhängigen Tonquelle kombiniert werden. (Siehe Seite 29) A l'aide des touches DIGITAL INPUT SELECTOR, choisir la source audio ou vidéo désirée pour enregistrement. *La fonction de sélecteur de son (SOUND SELECTOR) permet de combiner une image vidéo et un son différent. (Voir p.29)	–
ANALOG → ANALOG		Using the ANALOG INPUT SELECTOR buttons, choose the source you wish to record. Wählen Sie die aufzunehmende Signalquelle mit den ANALOG INPUT SELECTOR-Tasten. A l'aide des touches ANALOG INPUT SELECTOR, choisir la source désirée pour enregistrement.	–
PHONO (MM/MC) CD/CDV TUNER VCR AUX/VIDEO	TAPE 1		
PHONO (MM/MC) CD/CDV TUNER VCR AUX/VIDEO TAPE 1	DAT/TAPE 2	Using the ANALOG INPUT SELECTOR buttons, choose the source you wish to record. Wählen Sie die aufzunehmende Signalquelle mit den ANALOG INPUT SELECTOR-Tasten. A l'aide des touches ANALOG INPUT SELECTOR, choisir la source désirée pour enregistrement.	– (Monitoring is possible when ON.) (Kontrollbetrieb möglich, wenn auf ON.) (Le côntrole est possible lors de la position marche (ON).)
PHONO (MM/MC) CD/CDV TUNER AUX/VIDEO TAPE-1	VCR	Using the ANALOG INPUT SELECTOR buttons, choose the audio or video source you wish to record. *With the SOUND SELECTOR function you can combine a video picture with a different sound. (See p.29) Wählen Sie die aufzunehmende Ton- oder Bildsignalquelle mit den ANALOG INPUT SELECTOR-Tasten. *Mit der SOUND SELECTOR-Funktion kann das Bild mit einer unabhängigen Tonquelle kombiniert werden. (Siehe Seite 29) A l'aide des touches ANALOG INPUT SELECTOR, choisir la source audio ou vidéo désirée pour enregistrement. *La fonction de sélecteur de son (SOUND SELECTOR) permet de combiner une image vidéo et un son différent. (Voir p.29)	–
DAT/TAPE 2	TAPE 1, VCR	Recording is not possible. Keine Aufnahme möglich. L'enregistrement n'est pas possible.	

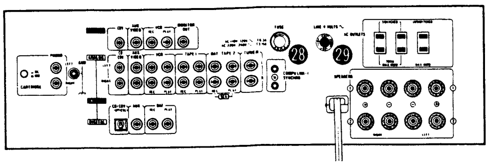
Fig. 9
Abb. 9
Afb. 9

CONNECTION DIAGRAM
ANSCHLUSSDIAGRAMM
SCHEMA DE RACCORDEMENTS
AANSLUITINGSDIAGRAM
DIAGRAMA DE CONEXIONES
ANSLUTNINGSSCHEMA

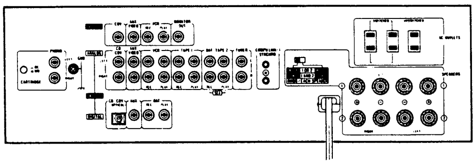

CD/CDV player
CD/CDV Player
Lecteur de disque compacts vidéo
CD/CDV-speler
Disco compacto convideo
CD/CDV-spelare
Video disc player
Bildplattenspieler
Lecteur de disque vidéo
Beeldplatenspeler
Reproductor de video discos
Videoskivspelare
AUDIO (OUT) (ANALOG)
VIDEO (OUT)
AUDIO (OUT) (ANALOG)
VIDEO (OUT)
Turntable
Plattenspieler
Tourne-disque
Draaitafel
Tocadiscos
Skivspelare



For Continental Europe, Australia, and the U.K.
Für Europa, Australien und Großbritannien.
Pour l'Europe continentale, l'Australie et le Royaume-Uni.
Voor het vasteland van Europa, Australië en U.K.
Para Europa Continental, Australia y Reino Unido.
För kontinentala Duropa, Australien coh Storbritannien.



For other areas
Anderen Gebiete
Pour d'autres pays
Voor andere landen
Para otros paises
För andra länder



For U.S.A. and Canada
Für U.S.A. und Kanada
Pour Etats-Unis et Canada
Voor de V.S. en Canada
Para los EE.UU. y Canada
För USA och Canada

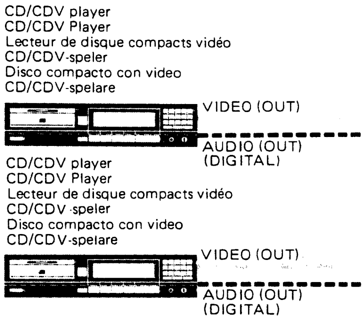

CD/CDV player
CD/CDV Player
Lecteur de disque compacts vidéo
CD/CDV-speler
Disco compacto con video
CD/CDV-spelare
VIDEO (OUT)
AUDIO (OUT) (DIGITAL)
CD/CDV player
CD/CDV Player
Lecteur de disque compacts vidéo
CD/CDV-speler
Disco compacto con video
CD/CDV-spelare
VIDEO (OUT)
AUDIO (OUT) (DIGITAL)

Fig. 1
Abb. 1
Afb. 1

① GND terminal
② PHONO terminals
③ Phono selector switch (CARTRIDGE (▬ MC/ ▙ MM)) – This switch selects between MC and MM type cartridges. When depressed, MC is selected. When returned to the original position MM is selected.
MC: Set to this mode when using a MC cartridge having an output voltage of less than 0.5 mV.
MM: Set to this mode when using a MM cartridge or a MC cartridge having an output of 0.5 mV or higher.

AUDIO

ANALOG

④ CD/CDV terminals
⑤ AUX/VIDEO terminals
⑥ VCR REC terminals
⑦ VCR PLAY terminals
⑧ TAPE 1 REC terminals
⑨ TAPE 1 PLAY terminals
⑩ DAT/TAPE 2 REC terminals
⑪ DAT/TAPE 2 PLAY terminals
⑫ TUNER terminals

DIGITAL

⑬ CD/CDV (OPTICAL) terminal
⑭ AUX terminal
⑮ DAT REC terminals
⑯ DAT PLAY terminals

① GND-Anschlußklemme
② PHONO-Anschlußbuchsen
③ Phono-Wählschalter (CARTRIDGE (▬ MC/ ▙ MM)) – Dieser Schalter dient zur Wahl zwischen Tonabnehmern des Typs MC und MM. Bei Tastendruck wird MC gewählt. Wenn die Taste wieder. in der Ausgangsstellung ist, ist MM gewählt.
MC: Beim Gebrauch eines MC-Tonabnehmers mit einer Ausgangsspannung von weniger als 0,5 mV.
MM: Beim Gebrauch eines MM-Tonabnehmers oder eines MC-Tonabnehmers mit einer Ausgangsspannung von 0,5 mV oder mehr.

AUDIO

ANALOG

④ CD/CDV-Anschlußbuchsen
⑤ AUX/VIDEO-Anschlußbuchsen
⑥ VCR REC-Anschlußbuchsen
⑦ VCR PLAY-Anschlußbuchsen
⑧ TAPE 1 REC-Anschlußbuchsen
⑨ TAPE 1 PLAY-Anschlußbuchsen
⑩ DAT/TAPE 2 REC-Anschlußbuchsen
⑪ DAT/TAPE 2 PLAY-Anschlußbuchsen
⑫ TUNER-Anschlußbuchsen

DIGITAL

⑬ CD/CDV (OPTICAL) Anschlußbuchsen
⑭ AUX-Anschlußbuchsen
⑮ DAT REC-Anschlußbuchsen
⑯ DAT PLAY-Anschlußbuchsen

① Borne de mise à la terre (GND)
② Bornes de platine tourne-disque (PHONO)
③ Commutateur de sélecteur de platine tourne-disque (PHONO) (CARTRIDGE (▬ MC/ ▙ MM)) – Ce commutateur permet la sélection entre les cellules de type MC et MM. Lorsque ce commutateur est enfoncé, MC est sélectionné. Lorsqu'il est remis sur sa position originale, MM est sélectionné.
MC: Choisir ce mode lors de l'utilisation d'une cellule MC ayant une tension de sortie inférieure à 0,5 mV.
MM: Choisir ce mode lors de l'utilisation d'une cellule MC ayant une tension de sortie de 0,5 mV ou plus.

AUDIO

ANALOG

④ Bornes de lecture de disques compacts/lecteur de disques compacts vidéo (CD/CDV)
⑤ Bornes auxiliaire/vidéo (AUX/VIDEO)
⑥ Bornes de mangétoscope (VCR REC)
⑦ Bornes de mangétoscope (VCR PLAY)
⑧ Bornes de bande 1 (TAPE 1 REC)
⑨ Bornes de bande 1 (TAPE 1 PLAY)
⑩ Magnétophone audionumérique/bande 2 REC (DAT/TAPE 2 REC)
⑪ Magnétophone audionumérique/bande 2 PLAY (DAT/TAPE 2 PLAY)
⑫ Bornes de syntoniseur (TUNER)

DIGITAL

⑬ Borne de lecture de disques compacts/lecteur de disques compacts vidéo (optionnel) (CD/CDV OPTICAL)
⑭ Borne auxiliaire (AUX)
⑮ Borne de mangétophone audionumérique (DAT REC)
⑯ Borne de mangétophone audionumérique (DAT PLAY)

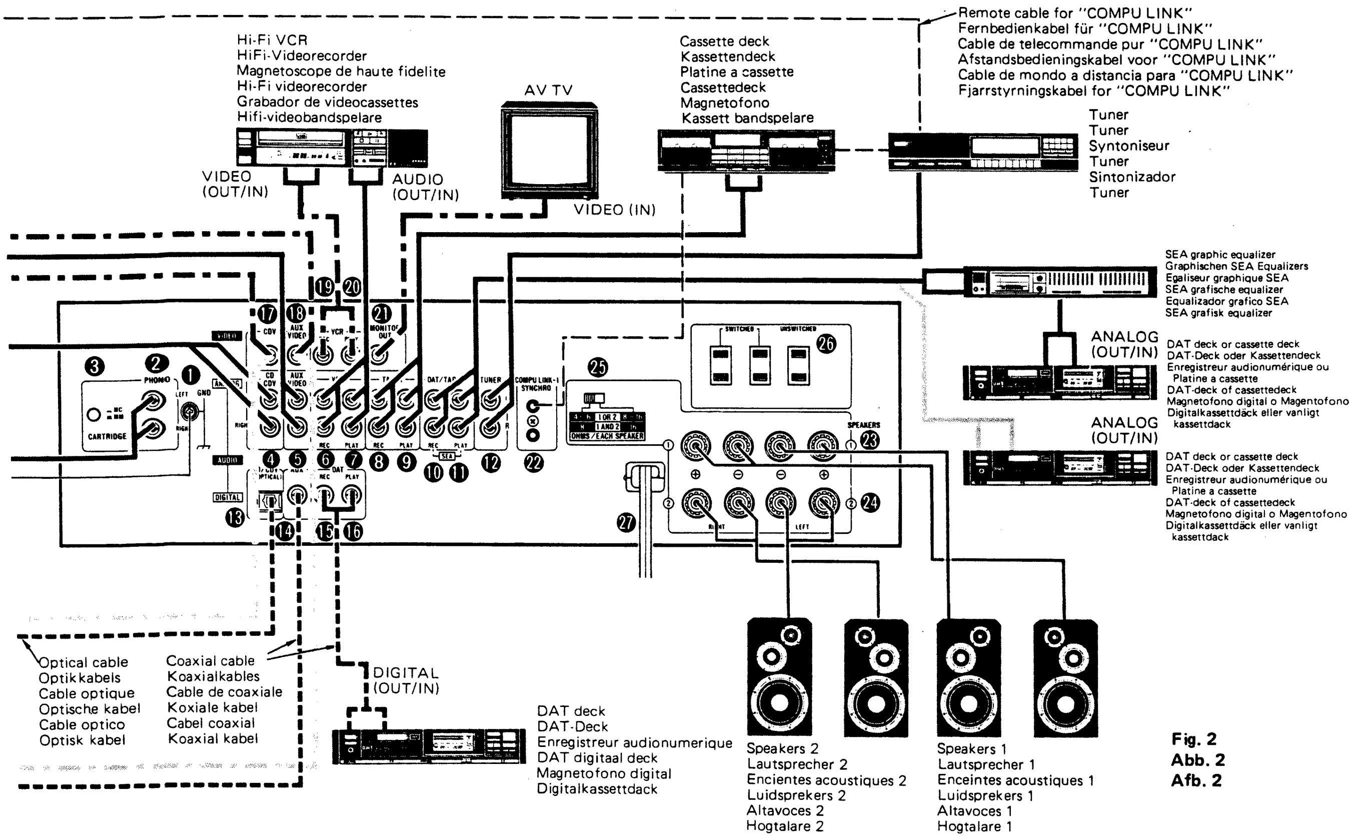

Remote cable for "COMPU LINK"
Fernbedienkabel für "COMPU LINK"
Cable de telecommande pur "COMPU LINK"
Afstandsbedieningskabel voor "COMPU LINK"
Cable de mondo a distancia para "COMPU LINK"
Fjarrstyrningskabel for "COMPU LINK"
Hi-Fi VCR
HiFi-Videorecorder
Magnetoscope de haute fidelite
Hi-Fi videorecorder
Grabador de videocassettes
Hifi-videobandspelare
AV TV
Cassette deck
Kassettendeck
Platine a cassette
Cassettedeck
Magnetofono
Kassett bandspelare
Tuner
Tuner
Syntoniseur
Tuner
Sintonizador
Tuner
VIDEO (OUT/IN)
AUDIO (OUT/IN)
VIDEO (IN)
SEA graphic equalizer
Graphischen SEA Equalizers
Egaliseur graphique SEA
SEA grafische equalizer
Equalizador grafico SEA
SEA grafisk equalizer
ANALOG (OUT/IN)
DAT deck or cassette deck
DAT-Deck oder Kassettendeck
Enregistreur audionumérique ou Platine a cassette
DAT-deck of cassettedeck
Magnetofono digital o Magentofono
Digitalkassettdäck eller vanligt kassettdack
ANALOG (OUT/IN)
DAT deck or cassette deck
DAT-Deck oder Kassettendeck
Enregistreur audionumérique ou Platine a cassette
DAT-deck of cassettedeck
Magnetofono digital o Magentofono
Digitalkassettdäck eller vanligt kassettdack
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒ ㉓ ㉔ ㉕ ㉖ ㉗
PHONO
CARTRIDGE
GND
AUDIO
DIGITAL
SPEAKERS
RIGHT
LEFT
Optical cable
Optikkabels
Cable optique
Optische kabel
Cable optico
Optisk kabel
Coaxial cable
Koaxialkables
Cable de coaxiale
Koxiale kabel
Cabel coaxial
Koaxial kabel
DIGITAL (OUT/IN)
DAT deck
DAT-Deck
Enregistreur audionumerique
DAT digitaal deck
Magnetofono digital
Digitalkassettdack
Speakers 2
Lautsprecher 2
Encientes acoustiques 2
Luidsprekers 2
Altavoces 2
Hogtalare 2
Speakers 1
Lautsprecher 1
Enceintes acoustiques 1
Luidsprekers 1
Altavoces 1
Hogtalare 1

Fig. 2
Abb. 2
Afb. 2

① Aardaansluiting (GND)
② Platenspeleraansluitingen (PHONO)
③ Platenspeler-keuzeschakelaar (CARTRIDGE (▬ MC/ ▙ MM)) – Stel deze schakelaar in overeenkomstig het gebruikte platenspelerelement (MC of MM). Druk de schakelaar in voor MC en zet de schakelaar in de vrije stand voor MM.
MC: Zet in deze stand bij gebruik van een MC-element met een uitgangsspanning van minder dan 0,5 mV.
MM: Zet in deze stand bij gebruik van een MM-element of een MC-element met een uitgangsspanning van 0,5 mV of hoger.

AUDIO

ANALOG

④ CD/CDV-aansluitingen (CD/CDV)
⑤ Hulp/video-aansluitingen (AUX/VIDEO)
⑥ Videorecorder-aansluitingen (VCR REC)
⑦ Videorecorder-aansluitingen (VCR PLAY)
⑧ Tape-1 aansluitingen (TAPE 1 REC)
⑨ Tape-1 aansluitingen (TAPE 1 PLAY)
⑩ DAT/tape-2 aansluitingen (DAT/TAPE 2 REC)
⑪ DAT/tape-2 aansluitingen (DAT/TAPE 2 PLAY)
⑫ Tuneraansluitingen (TUNER)

DIGITAL

⑬ CD/CDV (optische) aansluiting (CD/CDV)
⑭ Hulpaansluiting (AUX)
⑮ DAT-aansluiting (DAT REC)
⑯ DAT-aansluiting (DAT PLAY)

① Terminal de puesta a tierra (GND)
② Terminales fonográficos (PHONO)
③ Selector fonográfico (CARTRIDGE (▬ MC/ ▙ MM) – Este interruptor selecciona ya sea la cápsula tipo MC o la tipo MM. Cuando se oprime, se selecciona MC. Cuando se retorna a la posición original, se selecciona MM.
MC: Ajuste a este modo cuando utilice una cápsula MC cuya tensión de salida sea menor que 0,5 mV.
MM: Ajuste a este modo cuando utilice una cápsula MM o una cápsula MC cuya salida sea igual o mayor que 0,5 mV.

AUDIO

ANALOG

④ Terminales para disco compacto/disco compacto con video (CD/CDV)
⑤ Terminales auxiliares/de video (AUX/VIDEO)
⑥ Terminales de videocassettes (VCR REC)
⑦ Terminales de videocassettes (VCR PLAY)
⑧ Terminales para magnetófono de cinta 1 (TAPE 1 REC)
⑨ Terminales para magnetófono de cinta 1 (TAPE 1 PLAY)
⑩ Terminales para magnetófono digital/magnetófono de cinta 2 (DAT/TAPE 2 REC)
⑪ Terminales para magnetófono digital/magnetófono de cinta 2 (DAT/TAPE 2 PLAY)
⑫ Terminales para sintonizador (TUNER)

DIGITAL

⑬ Terminal para disco compacto/disco compacto con video (Optico) (CD/CDV (OPTICAL))
⑭ Terminal auxiliar (AUX)
⑮ Terminal para magnetófono digital (DAT REC)
⑯ Terminal para magnetófono digital (DAT PLAY)

① Jorduttag (GND)
② Skivspelaringångar (PHONO)
③ CARTRIDGE (▬ MC/ ▙ MM) – Används för omkoppling mellan MC- eller MM pickup. När MC pickup används skall omkopplaren vara intryckt och när MM pickup används skall omkopplarn inte vara intryckt.
MC: Sätt i detta läge vid användning av en MC-pickup (rörlig spole), vars utspänning är lägre än 0,5 mV.
MM: Sätt i detta läge vid användning av en MC-pickup (rörlig magnet) eller en MC-pickup (rörlig spole), vars utspänning är minst 0,5 mV.

AUDIO

ANALOG

④ CD/CDV-uttag
⑤ AUX/VIDEO-uttag
⑥ VCR REC-uttag
⑦ VCR PLAY-uttag
⑧ TAPE 1 REC-uttag
⑨ TAPE 1 PLAY-uttag
⑩ DAT/TAPE 2 REC-uttag
⑪ DAT/TAPE 2 PLAY-uttag
⑫ TUNER-uttag

DIGITAL

⑬ Hållare för nätspänningssäkring
⑭ AUX-uttag
⑮ DAT REC-uttag
⑯ DAT PLAY-uttag

VIDEO

⑰ CDV terminal
⑱ AUX/VIDEO terminal
⑲ VCR REC terminals
⑳ VCR PLAY terminals
㉑ MONITOR OUT terminal

GENERAL

㉒ COMPU LINK-1/SYNCHRO terminals
㉓ SPEAKERS-1 terminals
㉔ SPEAKERS-2 terminals
㉕ Speaker impedance switch***

When connecting the speaker unit, first of all select the speaker unit which has the impedance corresponding to the numeral displayed near the speaker terminal.

Next, in order to match the speaker unit which you are trying to connect, change-over the ㉕ speaker impedance switch, so that it will correspond to the displayed numeral.

Notes:

- **If the speaker impedance switch is not set as stipulated above, it may cause over-heating or improper output from the speakers.**
- **Do not connect the power cord to the wall outlet before or during the operation described above.**

㉖ AC OUTLETS**
㉗ Powercord
㉘ AC line fuse holder*
㉙ AC voltage selector*

When this equipment is used in an area where the supply voltage is different from the preset voltage, reset the voltage selector to the correct position. Change the fuse to the designated capacity.

Notes:

1. **If there is no earth line coming from the record player then there is no need to make an earth connection.**
2. **Remove the cover before connecting optical cable.**
3. **Do not connect a digital type output to any terminal of the amplifier other than the digital input terminals.**
4. **When connections are made to both the ANALOG and DIGITAL terminals of a DAT deck the ANALOG terminals of the DAT deck should be connected to the DAT/TAPE 2 terminals of the amplifier to prevent oscillation.**
5. **A COMPU LINK line may be connected to either of the two SYNCHRO terminals.**
6. **Any television, FM, or AM antenna cable should be kept away from the power cord. If an antenna cable is near the power cord, noise may be picked up.**
7. **Remove the cover from the CD/CDV (OPTICAL) terminal before connecting optical cable. Since optical cable is made of plastic or glass material be careful not to bend it sharply.**

VIDEO

⑰ CDV-Anschlußbuchsen
⑱ AUX/VIDEO-Anschlußbuchsen
⑲ VCR REC-Anschlußbuchsen
⑳ VCR PLAY-Anschlußbuchsen
㉑ MONITOR OUT-Anschlußbuchsen

GENERAL

㉒ COMPU LINK-1/SYNCHRO-Anschlußbuchsen
㉓ SPEAKERS-1 Anschlußbuchsen
㉔ SPEAKERS-2 Anschlußbuchsen
㉕ Lautsprecherimpedanzschalter***

Beim Anschluß der Lautsprechereinheit ist zuerst darauf zu achten, daß die Impedanz der gewählten Lautsprechereinheit dem Wert neben der Lautsprecherbuchse am Verstärker entspricht.

Um die anzuschließende Lautsprechereinheit dann der Anlage korrekt anzugleichen, schalten Sie den Lautsprecherimpedanzschalter ㉕ danach so um, daß seine Position den vorgegebenen Wert aufweist.

Hinweise:

- **Falls die Lautsprecherimpedanz nicht wie oben beschrieben voreingestellt wird, kann es zu Überhitzen oder mangelhafter Leistung der Lautsprecher kommen.**
- **Schließen Sie das Netzkabel erst dann an die Wandsteckdose an, wenn die genannte Voreinstellung abgeschlossen ist.**

㉖ Netzanschlüsse**
㉗ Netzkabel
㉘ Sicherungsfach*
㉙ Netzspannungswähler*

Wenn die voreingestellte Netzspannung an diesem Gerät nicht mit der tatsächlich vorhandenen übereinstimmt, den Spannungswähler auf den erforderlichen Wert einstellen. Die Sicherung mit der vorgeschriebenen Leistung austauschen.

Hinweise:

1. **Falls der Plattenspieler kein Massekabel aufweist, braucht auch keine Erdung vorgenommen zu werden.**
2. **Heben Sie vor Anschluß des Lichtleiterkabels die Abdeckung ab.**
3. **Schließen Sie jegliche Digitalsignalkabel grundsätzlich nur an die Digitaleingangsbuchsen des Verstärkers an.**
4. **Wenn Anschlüsse sowohl an die ANALOG-wie auch an die DIGITAL-Buchsen eines DA-Decks vorgenommen werden sollen, sind die ANALOG-Buchsen des DA-Decks mit den DAT/TAPE 2-Buchsen des Verstärkers zu verbinden, um Oszillation zu verhindern.**
5. **Ein COMPU LINK-Signalkabel kann beliebig an eine der beiden SYNCHRO-Buchsen angeschlossen werden.**
6. **Jegliche Fernsehgerät-, UKW- oder MW/LW/SW-Antennenkabel sollten vom Netzkabel ferngehalten werden. Antennenkabel, die in unmittelbarer Nähe von Netzkabeln verlegt sind, können Störgeräusche verursachen.**
7. **Heben Sie vor Anschluß des Lichtleiterkabels die Abdeckung von der Anschlußbuchse CD/CDV (OPTICAL) ab. Da Lichtleiterkabel aus Kunststoff oder Glas sind, dürfen sie nicht zu stark gebogen werden.**

VIDEO

⑰ Borne de lecture de disques compacts vidéo
⑱ Bornes auxiliaire/vidéo (AUX/VIDEO)
⑲ Bornes de mangétoscope (VCR REC)
⑳ Bornes de mangétoscope (VCR PLAY)
㉑ Borne MONITOR OUT

Bornes générales (GENERAL)

㉒ Bornes COMPU LINK-1/SYNCHRO
㉓ Bornes de haut-parleurs 1 (SPEAKERS-1)
㉔ Bornes de haut-parleurs 2 (SPEAKERS-2)
㉕ Commutateur d'impédance de haut-parleurs***

Lors du raccordement des haut-parleurs, sélectionner d'abord l'unité de haut-parleurs ayant l'impédance qui correspond à la valeur numérique affichée près de la borne de haut-parleurs.

Ensuite, afin d'adapter l'unité de haut-parleurs à raccorder, manipuler le commutateur d'imédance de haut-parleurs ㉕ pour qu'il corresponde à la valeur numérique.

Remarques:

- **Si le commutateur d'impédance de haut-parleurs n'est pas réglé comme indiqué ci-dessus, cela risque de provoquer la surchauffe ou la sortie inexacte des haut-parleurs.**
- **Ne pas raccorder le cordon d'alimentation à la prise de courant murale avant ou pendant l'opération décrite ci-dessus.**

㉖ Prises CA**
㉗ Cordon d'alimentation
㉘ Compartiment de fusible de ligne CA*
㉙ Sélecteur de tension de ligne CA*

Quand cet appareil est utilisé dans une région où la tension secteur est différente de celle qui est préréglée, replacer le sélecteur de tension sur la position correcte. Transformer le fusible selon la capacité designée.

Remarques:

1. **S'il n'y a pas de ligne de mise à la terre venant du phonographe, il n'est pas nécessaire d'effectuer le raccordement de mise à la terre.**
2. **Enlever le couvercle avant de raccorder le câble optique.**
3. **Ne pas raccorder la sortie numérique aux autres bornes de l'amplificateur que celles d'entrée numérique.**
4. **Lorsque les raccordements sont effectués aux bornes analogiques (ANALOG) et numériques (DIGITAL) de l'enregistreur audionumérique, les bornes analogiques (ANALOG) de ce dernier doivent être raccordées à celles de magnétophone audionumérique/bande 2 (DATE/TAPE 2) de l'amplificateur pour empêcher l'oscillation.**
5. **Une ligne COMPU LINK peut être raccordée à l'une des deux bornes de synchronisation (SYNCHRO).**
6. **Tout câble d'antenne de téléviseur, de FM ou de AM doit être écarté du cordon d'alimentation. En effet, si un câble d'antenne est proche du cordon d'alimentation, les parasites risquent d'être captés.**
7. **Enlever le couvercle de la borne de lecture de disques compacts/lecteurs de disques compacts vidéo (optionnel) (CD/CDV OPTICAL) avant de raccorder le câble optique. Ce dernier est fait en matières plastiques ou en verre. Veiller donc à ne pas le plier violemment.**

8. A digital unit, such as a CD player may cause noise when certain television or FM broadcasting frequencies are being received. If this occurs, switch off the digital unit.
9. With the COMPU LINK control system, one touch operation of all system components is achieved by operating the remote control unit, the source selector buttons on the amplifier, or by pushing a related buttons of a desired source.
10. ● Units connected to the digital terminals or the DAT/TAPE 2 terminals of the amplifier cannot be operated by the COMPU LINK system.
    (In order to prevent erroneous operation, do not connect COMPU LINK cable.)
    ● There is no special sequence for making connections to the COMPU LINK terminals of the various units which can be operated by the COMPU LINK system.
    ● This arrangement ensures that accidental interruption of play does not occur during synchronized recording.

* Not provided on units for the U.S.A., Canada, Continental Europe, the U.K. and Australia.

** Do not connect equipment requiring more than the outlet's rated value. Not provided on this for Continental Europe, the U.K. and Australia.

*** Provided on units for the U.S.A., Canada, Continental Europe, the U.K. and Australia.

8. Ein Digitalgerät, wie z.B. ein CD-Player, kann Störgeräusche verursachen, wenn bestimmte Fernsehoder UKW-Senderfrequenzen empfangen werden. Schalten Sie das Digitalgerät in solchen Fällen aus.
9. Mit dem COMPU LINK-System lassen sich sämtliche Anlagenkomponenten mit einem Knopfdruck vonder Fernbedienungseinheit ansteuern, wie auch über die Signalquellen-Wahltasten am Verstärker oder entsprechende Tasten einer anderen Signalquelle.
10. ● Geräte, die an die Digitalbuchsen oder DAT/TAPE 2-Anschlußbuchsen des Verstärkers angeschlossen sind, können nicht über das COMPU LINK-System betrieben werden.
    (Um versehentliche Betätigung auszuschalten, sollten Sie das COMPU LINK-Kabel nicht anschließen.)
    ● Anschlüsse an die COMPU LINK-Buchsen verschiedener COMPU LINK-kompatibler Geräte können in beliebiger Reihenfolge vorgenommen werden.
    ● Damit ist gewährleistet, daß während synchronisiertem Aufnahmebetrieb keine versehentliche Unterbrechung auftreten kann.

* Nicht vorzufinden an den U.S.A., Kanada, Europa und Australien ausgelieferten Geräten.

** Die Leistungsaufnahme aller an diese Steckdosen angeschlossenen Geräte darf den vorgegebenen Höchstwert nicht überschreiten. Gehört nicht zum Liefrumfang bei in Europa und Australien Ausgelieferten Geräten.

*** Vorhanden an Geräten für U.S.A., Kanada, Kontinental-Europe, Großbritannien und Australien

8. Un appareil numérique tel que le lecteur de disques compacts risque de produire du bruit lorsque les fréquences de téléviseur ou d'émission en FM sont reçues. Si cela arrive, couper le contact de l'appareil numérique.
9. A l'aide de l'unité de commande COMPU LINK, il est possible d'effectuer la manipulation de tous les éléments du système par une seule touche en utilisant le boîtier de télécommande ou les touches de sélecteur de source de l'amplificateur, ou en appuyant sur les touches d'une source désirée.
10. ● Les appareils raccordés aux bornes numériques ou aux bornes de magnétophone audionumérique/bande 2 (DAT/TAPE 2) de l'amplificateur ne peuvent pas mis en fonction à l'aide du système COMPU LINK. (Afin d'empêcher le fonctionnement erroné, ne pas raccorder le câble COMPU LINK.)
    ● Il n'y a pas de séquence spéciale pour effectuer les raccordements aux bornes COMPU LINK des appareils divers qui peuvent être mis en fonction par le système COMPU LINK.
    ● Cette opération permet d'empêcher l'interruption accidentelle de lecture au cours de l'enregistrement synchronisé.

* Non prévu sur les appareils destinés aux Etats-Unis, au Canada, à l'Europe Continentale, au Royaume-Uni et à l'Australie.

** Ne pas y raccorder un appareil dont la consommation dépasse la valeur nominale de la prise. Pas prévues sur les appareils pour l'Europe continentale, le Royaume-Uni et l'Australia.

*** Fourni sur les appareils pour les Etats-Uni et l'Australie, l'Europe continentale, le Royaume-Uni et l'Australie.

HOW TO USE S.E.A. GRAPHIC EQUALIZER

Very precise adjustment of tone and sound field can be achieved when a SEA GRAPHIC EQUALIZER is connected to the DAT/TAPE 2 terminals.

Note:

- **The SEA connected to the DAT/TAPE 2 terminals cannot be operated when either CD DIRECT or D/A CONVERTER DIRECT is being used.**

BEDIENUNG DES GRAPHISCHEN S.E.A.-EQUALIZERS

Wenn ein SEA-GRAPHIC-EQUALIZER an die DAT/TAPE 2-Buchsen des Verstärker angeschlossen ist, ist äußerst feine Abstimmung des Ton/Klangbereichs möglich.

Hinweis:

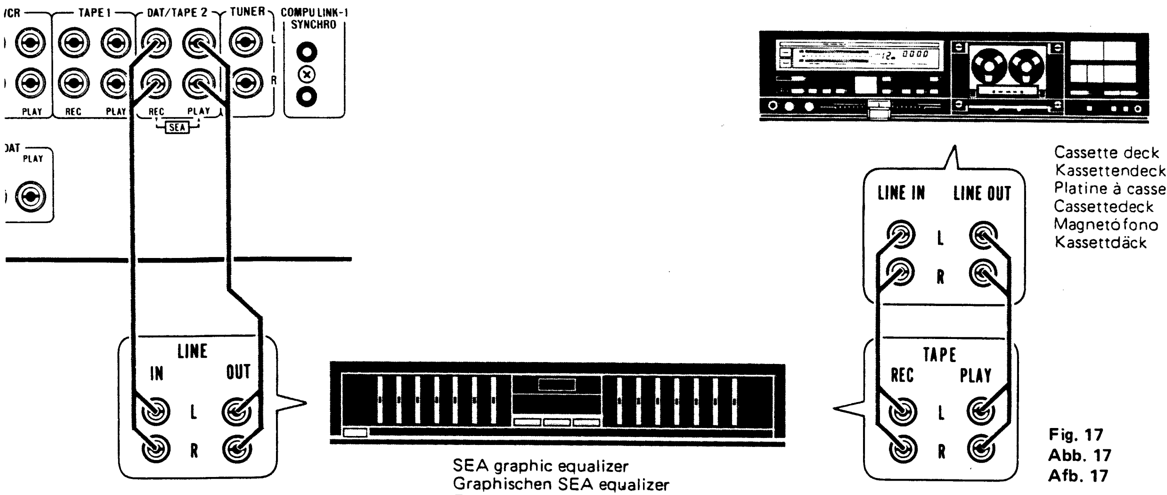
- **Ein an die DAT/TAPE 2-Buchsen angeschlossenes SEA-Gerät läßt sich nicht verwenden, wenn CD DIRECT oder D/A CONVERTER DIRECT in Betrieb sind.**

FONCTIONNEMENT DE L'EGALISEUR GRAPHIQUE S.E.A.

Il est possible de réaliser le réglage très précis du champs de tonalité et de son lorsqu'un égaliseur graphique S.E.A. est raccordé aux bornes DAT/TAPE 2.

Remarque:

- **Il n'est pas possible de faire fonctionneer l'appareil S.E.A. raccordé aux bornes DAT/TAPE 2 pendant que la touche CD DIRECT ou D/A CONVERTER DIRECT est utilisée.**



SEA graphic equalizer
Graphischen SEA equalizer
Egaliseur graphique SEA
SEA grafische equalizer
Ecualizador grafico SEA
SEA grafisk equalizer

Cassette deck
Kassettendeck
Platine à cassette
Cassettedeck
Magnetófono
Kassettdäck

Fig. 17
Abb. 17
Afb. 17

OPERATION

To control the SOUND FIELD and adjust TONE

1. Press the DAT/TAPE 2 MONITOR button.
2. Operate the slide controls of the SEA graphic equalizer.

Recording with the SEA graphic equalizer

1. Press the SEA REC button on the SEA graphic equalizer.
2. Press the DAT/TAPE 2 MONITOR button.
3. Operate the slide controls of the SEA graphic equalizer.
4. Press the buttons of the tape deck to begin recording.

For more details of its connection and operation, refer to the instruction book of the S.E.A. graphic equalizer.

BEDIENUNG

Um Klangfeld und Ton zu steuern:

1. DAT/TAPE 2 MONITOR-Taste betätigen.
2. Die Schieberegler am SEA GRAPHIC EQUALIZER betätigen.

Aufnahmen mit dem SEA GRAPHIC EQUALIZER

1. Die SEA REC-Taste am SEA GRAPHIC EQUALIZER betätigen.
2. DAT/TAPE 2 MONITOR-Taste betätigen.
3. Die Schieberegler am SEA GRAPHIC EQUALIZER betätigen.
4. Die Aufnahme mittels der Tasten des Kassettendecks beginnen.

Weitere Angaben zu Anschluß und Betrieb des S.E.A. Graphic Equalizer sind in dessen Bedienungsanleitung zu finden.

FONCTIONNEMENT

Pour contrôler le champ sonore (SOUND FIELD) et pour régler la tonalité

1. Appuyer sur la touche de moniteur de magnétophone audionumperique / bande 2 (DAT/TAPE 2 MONITOR).
2. Pour manipuler les commandes progressives del l'égaliseur graphique SEA.

Pour l'enregistrement avec l'égaliseur graphique SEA

1. Appuyer sur la touche d'enregistrement SEA (SEA REC) de l'égaliseur graphique SEA.
2. Appuyer sur la touche de moniteur de magnétophone audionumérique / bande 2 (DAT/TAPE 2 MONITOR).
3. Pour manipuler les commandes progressives de l'égaliseur graphique SEA.
4. Appuyer sur les touches de la platine d'enregistrement (TAPE DECK) pour commencer l'enregistrement.

Pour plus de détails sur les raccordements et le fonctionnement de l'égaliseur graphique, voir son manuel d'instructions.

TROUBLESHOOTING

Check the following points before calling for repairs. .....

There is a difference between the sound level from the record player and the level form another source.

The MM/MC type cartridge selector switch is not set in the correct position.

– Set the selector switch on the back of the amplifier correctly.

No sound output

Erroneous cable connection

– Correct the connection

The input selector switch is not in the right position.

– Set switch in the correct position.

The DAT/TAPE 2 MONITOR switch is in the "ON" position.

– Press the DAT/TAPE 2 MONITOR switch so that the indicator light goes off.

Speaker line are disconnected.

– Check connections between the back of the amplifier and the speakers.

Sound is only coming from one speaker.

The lines going to a speaker are disconnected.

– Check connections between the speakers and the back of the amplifier.

The BALANCE knob is turned completely to one side.

– Return the BALANCE knob to the center.

When the volume is turned up while listening to a record there is a BOOMING sound.

The record player is pickling up vibrations from the speakers. (howling)

– Place the speakers well away from the record player and place the record player on a firm base.

PROBLEMLÖSUNGEN

Gehen Sie bitte die folgenden Punkte durch, bevor Sie sich an einen Fachmann wenden. .....

Der Lautstärkepegel vom Schallplattenspieler ist vom Lautstärkepegel einer anderen Signalquelle verschieden.

Der MM/MC-Tonabnehmer-Wahlschalter ist nicht auf die richtige Position gestellt.

– Den Wahlschalter auf der Rückseite des Verstärkers korrekt einstellen.

Kein Ton zu hören.

Falscher Kabelanschluß

– Den Anschluß richtig vornehmen.

Der Eingangsquellen-Wahlschalter ist nicht in der richtigen Position.

– Den Schalter auf die gegenwärtig korrekte Position stellen.

Der DAT/TAPE 2 MONITOR-Schalter steht auf Position ON.

– Den DAT/TAPE 2 MONITOR-Schalter so stellen, daß die Anzeigelampe erlischt.

Die Lautsprecher sind abgeklemmt.

– Die Anschlüsse zwischen Verstärker-Rückwand und Lautsprechern überprüfen.

Der Ton kommt nur von einem der Lautsprecher.

Die Verbindungskabel zu den Lautsprechern sind abgeklemmt.

– Anschlüsse zwischen den Lautsprechen und der Verstärkerrückseite prüfen.

Der BALANCE-Regler ist ganz nach einer Seite hin gedreht.

– Den BALANCE-Regler wieder auf die Mittelposition stellen.

Beim Anhören einer Schallplatte bewirkt das Anheben der Lautstärke einen heulenden Ton.

Der Schallplattenspieler nimmt Vibrationen von den Lautsprecher auf (Rückkopplungsheulen).

– Stellen Sie die Lautsprecher in ausreichender Entfernung vom Plattenspieler auf, der auf festem Untergrund stehen sollte.

EN CAS DE PANNE

Effectuer les contrôles indiqués ci-dessous avant de s'adresser à un réparateur. .....

Il y a une différence entre le niveau sonore de l'électrophone et celui d'une autre source.

Le commutateur de sélecteur de cellule MM/MC n'est pas mis sur la position correcte.

– Mettre le commutateur de sélecteur de l'arrière de l'amplificateur sur la position correcte.

Aucune sortie de puissance sonore

Raccordement érroné de câble

– Effectuer le raccordement convenable.

Le commutateur de sélecteur d'entrée de puissance n'est pas mis sur la position correcte.

– Mettre le commutateur sur la position correcte.

Le commutateur de moniteur de bande (DAT/TAPE 2 MONITOR) est sur la position marche (ON).

– Appuyer sur la touche de moniteur de bande (DAT/TAPE 2 MONITOR) pour que le témoin s'éteigne.

– Vérifier les reccordements entre l'arrière de l'amplificateur et les haut-parleurs.

Le son vient d'un seul haut-parleur

Les lignes allant à un haut-parleur ne sont pas raccordées.

– Vérifier les raccordements entre les haut-parleurs et l'arrière de l'amplificateur.

La commande de balance (BALANCE) est complètement tournée d'un côté.

– Remettre la commande de balance (BALANCE) sur la position centrale.

Lorsque le volume est augmenté au cours de la lecture d'un disque, il y a un son de tonneau.

L'électrophone est en train de ramasser des vibrations des haut-parleurs. (ronflement)

– Eloigner suffisamment les haut-parleurs de la platine tourne-disque et placer celle-ci sur un support ferme.

Removal Procedures

■ Removing the top cover

1. Remove the four screws securing both sides and the two screws securing the rear of the top cover.
2. Remove the top cover while gently lifting up the rear side (see Fig. 1).

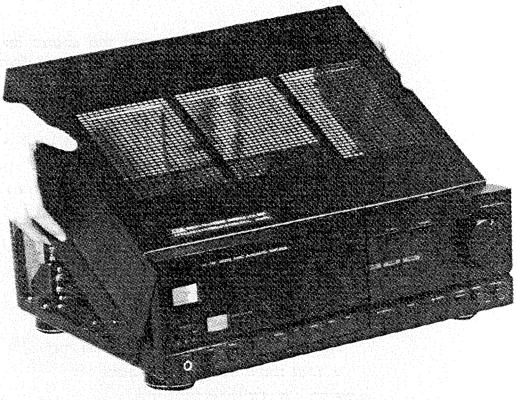


Fig. 1

■ Removing the front panel

1. Remove the top cover.
2. Take off the volume knob.
3. Remove the three plastic rivets on top of the panel and the three screws on the bottom side.
4. Pull out the three lamps on the back side of the front panel and then remove the panel (see Fig. 2).

Note: **When pulling out the lamps, make sure to grasp them by the plastic section of the lamps. Never grasp the cord to pull out the lamps as this may damage the equipment.**

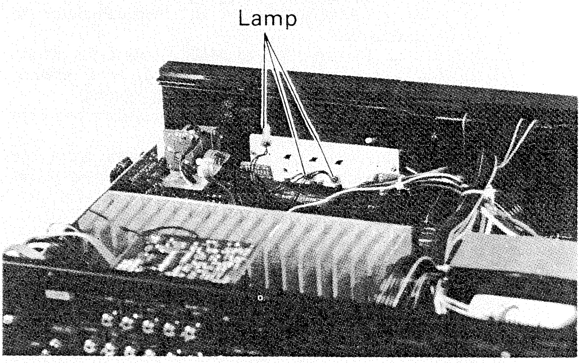


Fig. 2

■ Removing the front PC Board

1. Remove the front panel.
2. Remove all connectors on the front PC.
3. Remove the three plastic rivets securing the front PC and the one plastic rivet securing the ENB-7077-7 PC.

Note: **When removing the connectors, always be sure to first release the lock.**

■ Removing the Volume/Trunk PC Board

1. Remove the top cover.
2. Remove the volume knob and the nuts securing the volume assembly.
3. Remove all connectors on the Volume/Trunk PC and the J251 connector on the analog input PC.
4. Remove the screws securing the rear cover.
5. Remove the PC as shown in the photo (See Fig. 3).

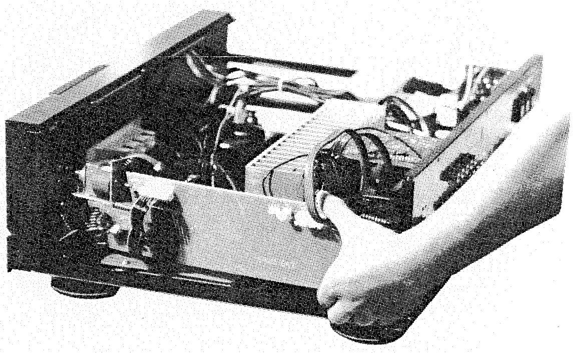


Fig. 3

■ Removing the power transistor

1. Remove the top cover.
2. Remove the 18 screws and the 2 fasteners and then remove the bottom cover.
3. Remove the solder of 4 power transistors.
4. Remove the 4 nuts securing the power transistor by using a 5.5 mm wrench.

Removing the DAC PC Board

. Remove the bottom cover.
. Remove the connectors that are attached to the Volume/Trunk PC.
. Remove the three screws securing the DAC PC.
. Remove the optical cap and two screws from the rear cover and remove the PC by pulling to the side (See Fig. 4).

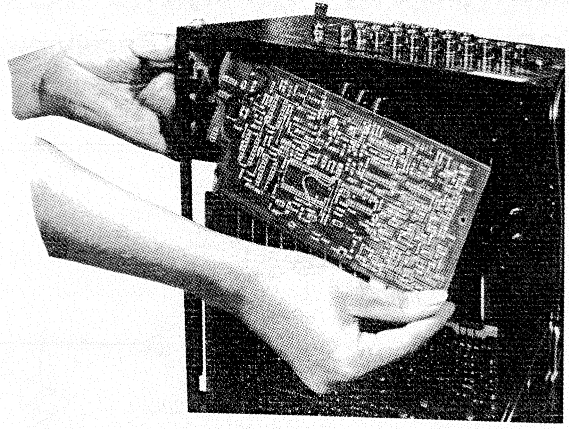


Fig. 4

Removing the Analog Output PC Board

. Remove the DAC PC.
:. Remove the screws securing the rear cover.
;. Remove the connectors attached to the Volume/Trunk PC.
·. Remove the fasteners on the platform for the analog output DC and remove the analog output PC together with the DC PC as shown in the figure (See Fig. 5).

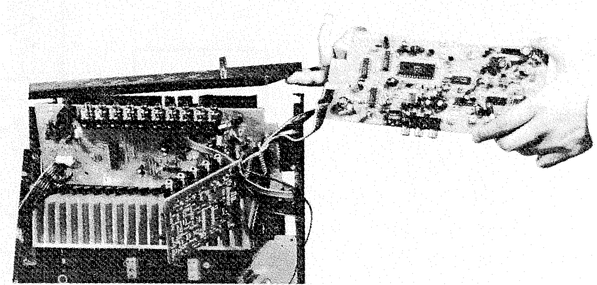
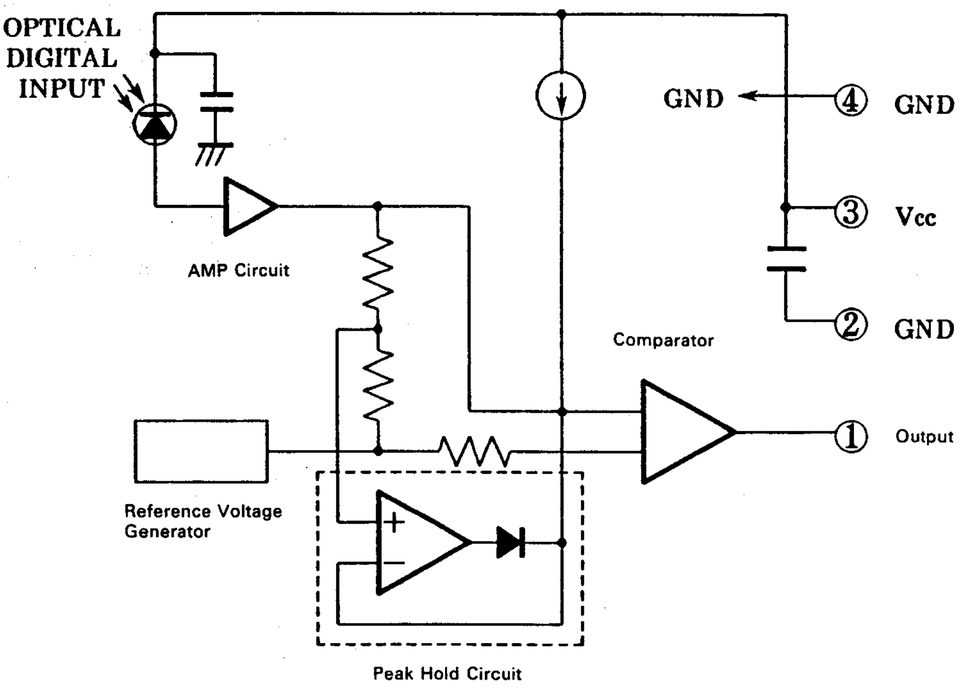


Fig. 5

Description of Major ICs

■ TORX172 (J411) : Optical Receiving Module

(1) Circuit Construction



(2) Circuit Description

When an optical signal is input to the Si-PIN photodiode, current flows with a sensitivity of 0.3 A/W (xp = 650 [nm]) or less. This current is impedance-converted and amplified by the AMP circuit, and the resulting signal voltage is input to the comparator.

At the same time, a reference voltage of the comparator is given by the ATC (Automatic Threshold Control) circuit. The ATC circuit consists of a peak hold circuit, which detects the peak value of the input voltage and maintains it for a certain period. The period in which the peak value is maintained is called the "time constant". It is set for 1 – 3 us for "Toslink" (used in this unit).

The signal voltage from the AMP circuit is divided in two by a resistor and input to the peak hold circuit. Therefore, the comparator compares the output voltage of the AMP circuit with the peak value of 1/2 of the output voltage. For this, the comparator output can accurately reproduce the signal transmitted from the optical transmission module of the transmitter at any time, even if the optical input fluctuates.

Furthermore, since a reference voltage generator is provided to keep the output voltage at the same level as the voltage output from the AMP circuit when there is no optical input, so that the reference voltage varies according to the temperature drift in the AMP circuit, a change in the characteristics due to a temperature change is minimized.

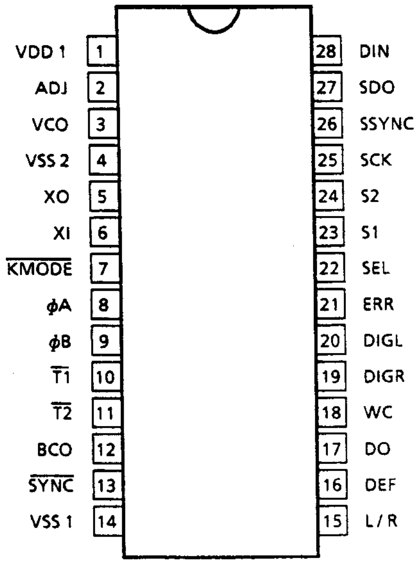
Also, a constant current power supply is provided and the reference voltage of the comparator is set slightly higher than the output voltage of the reference voltage generator so that the transmission is made accurately even under the condition when there is no optical input for a long period.

■ YM3623B (IC403): Digital Audio Interface Receiver

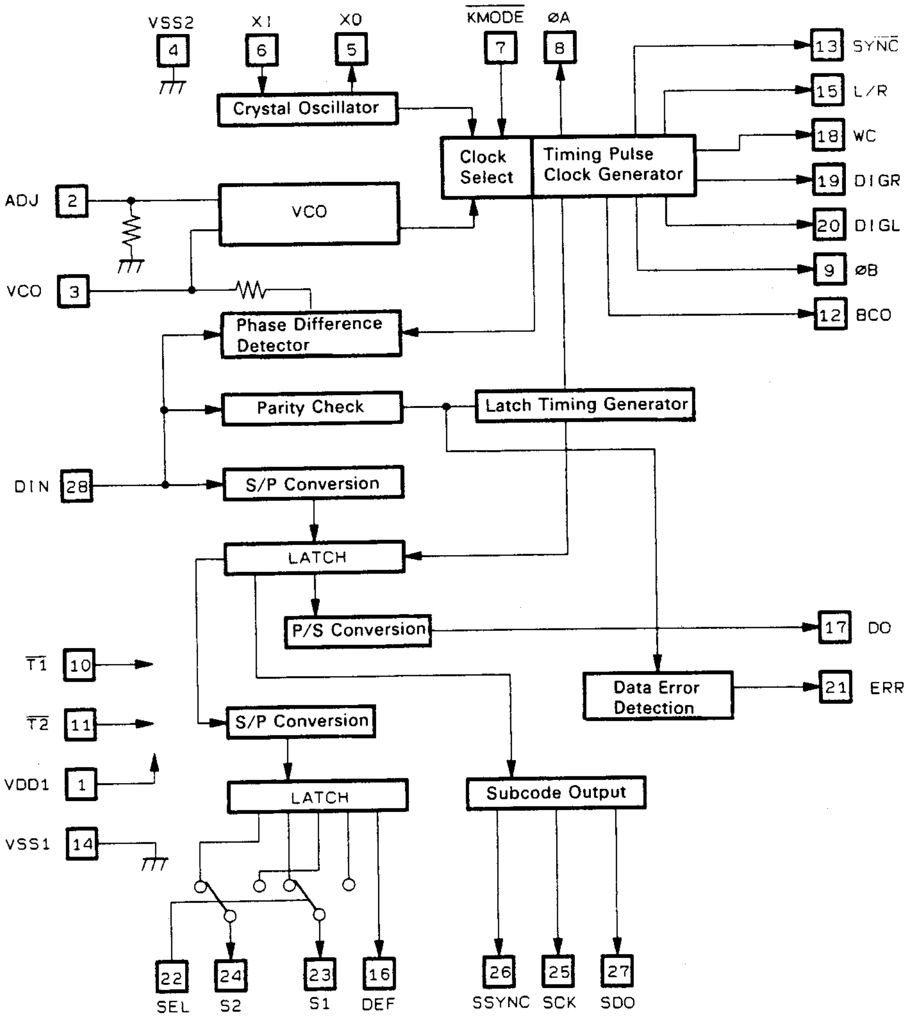
(1) Function

1) A PLL circuit is incorporated to synchronize with a digital signal (conforming to the Digital Audio Interface Format) which is transmitted from the outside. Therefore, the sampling frequency is followed up automatically.
2) This outputs the audio signal with its MSB (most significant bit) first. In synchronism with it, this outputs the timing clock for sampling and holding the D/A output, L-channel and R-channel signals.
3) Since it provides the pins used for outputting the subcode signals, only the subcode data can be picked up.
4) It can output the sampling frequency, as well as signals indicating the presence/absence of copy enable, emphasis and error in the audio signal transmitted.
5) When an error is detected in a digital signal conforming to the Digital Audio Interface Format, the previous audio data is output again.

(2) Appearance


VDD 1 1
ADJ 2
VCO 3
VSS 2 4
XO 5
XI 6
KMODE 7
ϕA 8
ϕB 9
T1 10
T2 11
BCO 12
SYNC 13
VSS 1 14
28 DIN
27 SDO
26 SSYNC
25 SCK
24 S2
23 S1
22 SEL
21 ERR
20 DIGL
19 DIGR
18 WC
17 DO
16 DEF
15 L/R

(3) Block Diagram


VSS2 4
XI 6
XO 5
KMODE 7
ØA 8
Crystal Oscillator
Clock Select
Timing Pulse Clock Generator
13 SYNC
15 L/R
18 WC
19 DIGR
20 DIGL
9 ØB
12 BCO
ADJ 2
VCO
VCO 3
Phase Difference Detector
Parity Check
Latch Timing Generator
DIN 28
S/P Conversion
LATCH
P/S Conversion
17 DO
Data Error Detection
21 ERR
T1 10
T2 11
VDD1 1
VSS1 14
S/P Conversion
LATCH
Subcode Output
22 SEL
24 S2
23 S1
16 DEF
26 SSYNC
25 SCK
27 SDO

(4) Pin Descriptions

Pins accompanied with (PU) are pulled up internally.

Pin No.	Pin Name	I/O	Functions
1	VDD		System power supply (+5 V)
2	ADJ	I	VCO oscillator frequency adjustment pin. No connection.
3	VCO	I/O	Externally connected capacitor pin for the VCO circuit
4	VSS2		GND pin for the VCO circuit. Connected in common with VSS1. They are not common inside of the LSI.
5	XO	O	Ceramic oscillator pin (18.00 MHz)
6	XI	I	Ceramic oscillator pin
7	$\overline{\text{KMODE}}$	I (PU)	H: Activates the PLL circuit when a signal is input to the DIN pin. Operates using the ceramic oscillator when there is no input to the DIN pin. L: Ceramic oscillator is used regardless of the state of the DIN pin.
8	ϕ A	O	18.00 MHz when the ceramic oscillator is used. When the PLL circuit is engaged, the frequency varies according to the data rate of the signal input to the DIN pin. (About 16.9344 MHz when fs = 44.1 kHz)
9	ϕ B	O	1/3-divided o/A when the ceramic oscillator is used. When the PLL circuit is engaged, the frequency varies according to the data rate of the signal input to the DIN pin. (About 5.6448 MHz when fs = 44.1 kHz)
10	$\overline{\text{T1}}$	I (PU)	Internal circuit check pin
11	$\overline{\text{T2}}$	I (PU)	Internal circuit check pin
12	BCO	O	Timing clock of the signal output from the DO pin
13	$\overline{\text{SYNC}}$	O	Sync signal
14	VSS1	O	System GND
15	L/R	O	H: Indicates L-channel data is output from the DO pin. L: Indicates R-channel data is output from the DO pin.
16	DEF	O	H: Indicates that the input data has been emphasized. L: Indicates that the input data has no emphasis code.
17	DO	O	16-bit data output
18	WC	O	Indicates that the data is output to the DO pin.
19	DIGR	O	R-channel deglitch signal
20	DIGL	O	L-channel deglitch signal
21	ERR	O	H: Indicates a parity error, or operation with the ceramic oscillator. L: Indicates no error.
22	SEL	I (PU)	Refer to the table below.
23	SI	O	Refer to the table below.
24	S2	O	Refer to the table below.
25	SCK	O	Clock for the subcode output
26	SSYNC	O	Subcode signal
27	SDO	O	Subcode data output pin
28	DIN	I (PU)	Data input pin

- **Concerning S1, S2 and SEL:**

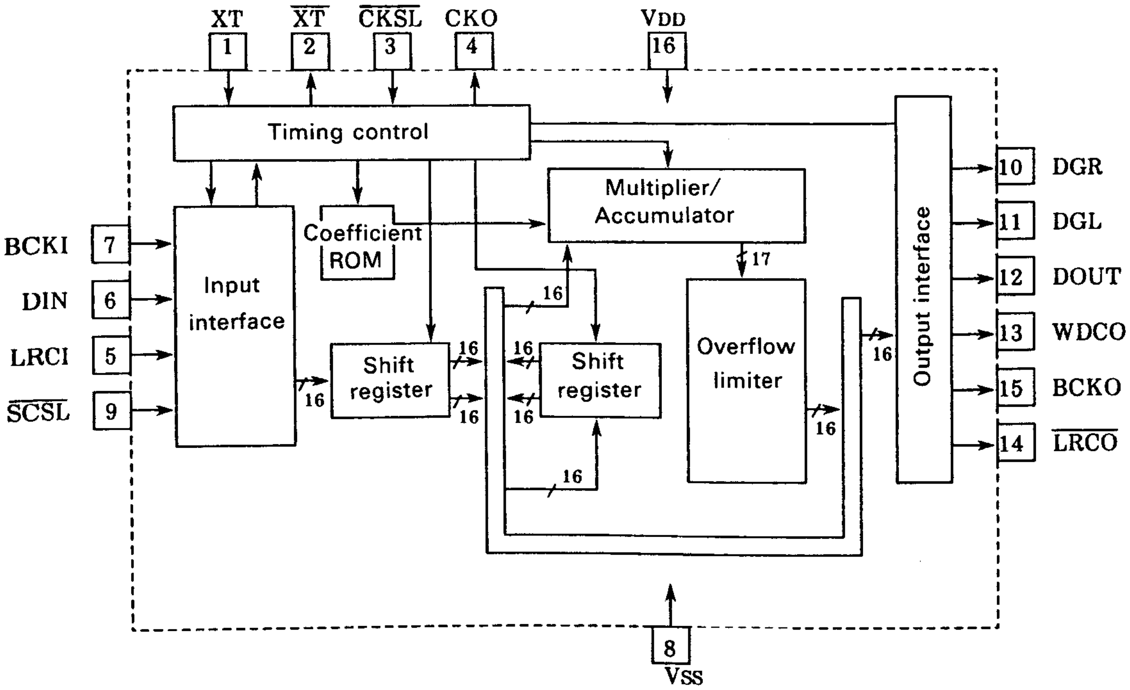
The S1 and S2 pins have a multiplied output function.
The S1/S2 output is changed by switching the SEL pin input.

Input	Output		Output	
SEL	S1	Function	S2	Function
L	L	Copy inhibit	L	CD (other than DAT)
	H	Copy enable	H	DAT
H	L		L	DIN input signal's sampling frequency is 44.1 kHz
	L		H	48KHz
	H		H	32KHz
	H		L	———

As shown above, the required data are picked up from the input digital signal conforming to the Digital Audio Interface Format, and output to pins S1 and S2.

■ SM5807EP (IC404): Quadruple oversampling digital filter

(1) Block diagram


XT
$\overline{XT}$
$\overline{CKSL}$
CKO
VDD
1
2
3
4
16
Timing control
Multiplier/ Accumulator
Output interface
BCKI
DIN
LRCI
$\overline{SCSL}$
7
6
5
9
Input interface
Coefficient ROM
Shift register
Shift register
Overflow limiter
16
17
10
11
12
13
15
14
DGR
DGL
DOUT
WDCO
BCKO
$\overline{LRCO}$
8
Vss

(2) Explanation of terminal functions:

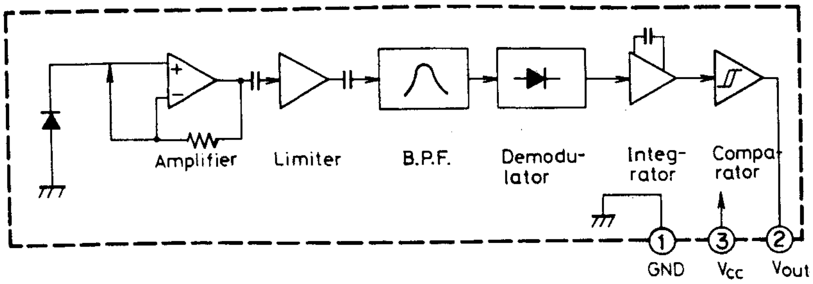
Pin No.	Terminal No.	I/O	Function
1	$\overline{XT}$	I	Oscillator section input terminal
2	XT	O	Oscillator section output terminal when CKSL=H. Open when CKSL=L
3	$\overline{CKSL}$	I(PU)	CKSL=H: 16.9344 MHz or 17.2872 MHz crystal oscillation to XT or external output. CKSL=L: 8.4672 MHz or 8.6436 MHz to XT.
4	CKO	O	Clock output (8.4672 MHz or 8.6436 MHz).
5	LRCI	I(PU)	44.1 kHz synchronous clock input.
6	DIN	I(PU)	Serial data input.
7	BCKI	I(PU)	Serial input bit clock input.
8	Vss		GND terminal
9	$\overline{SCSL}$	I(PU)	SCSL=H; System clock = 192 fs SCSL=L: System clock = 196 fs.
10	DGR	O	Rch de-glitch signal (176.4 kHz)
11	DGL	O	Lch de-glitch signal (176.4 kHz)
12	DOUT	O	Serial data output.
13	WDCO	O	Output control clock (352.8 kHz)
14	$\overline{LRCO}$	O	Output control clock (176.4 kHz)
15	BCKO	O	Serial input bit clock (8.4672 MHz or 8.6436 MHz)
16	VDD		Power source terminal (+5V)

■ μPD75104CW-115 (IC101): System Control Microcomputer

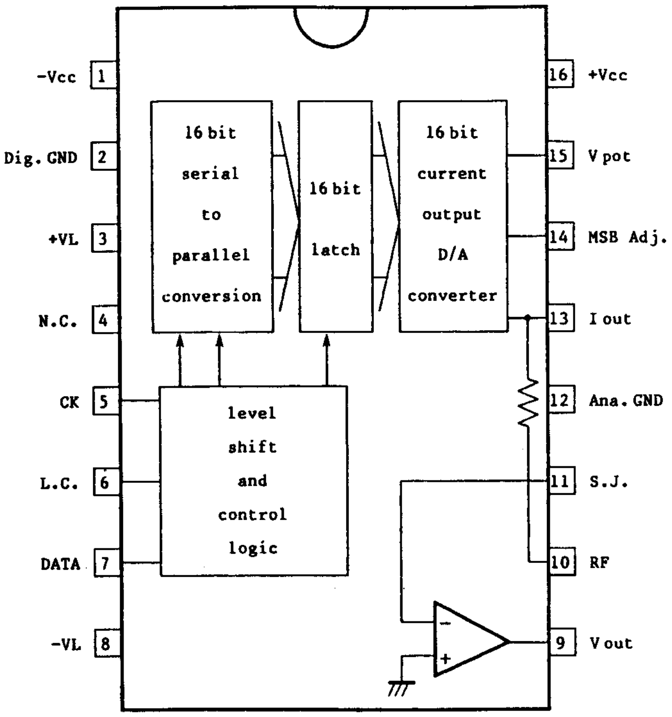
1	DCS IN	Computer link signal input
2	C/S	Tip select
3	$\overline{\text{RM IN}}$	Remote input
4	$\overline{\text{INH}}$	Detection of power OFF
5	—	Connect to GND
6	ERR	Input the signal from IC403 (YM3623B)
7	S1	Input the signal from IC403 (YM3623B)
8	S2	Input the signal from IC403 (YM3623B)
9	—	Connect to GND
10	—	Connect to GND
11	$\overline{\text{RM IND}}$	Light sensor indicator on the remote control lights
12	D.MUTE	Muting output for digital system only
13	A.MUTE	Muting output
14	STB	Strobe output to IC201 and IC204
15	CD Sw.	Input of computer link select switch of CD
16	DATA	Data output to IC201 and IC204
17	$\overline{\text{SCK}}$	Clock output to IC201 and IC204
18	DATA Sw.	Input of computer link select switch of DAT
19	KEY out3	KEY matrix output
20	KEY out2	KEY matrix output
21	KEY out1	KEY matrix output
22	KEY out0	KEY matrix output
23	—	No connection
24	—	No connection
25	—	No connection
26	—	No connection
27	KEY in3	KEY matrix input
28	KEY in2	KEY matrix input
29	KEY in1	KEY matrix input
30	KEY in0	KEY matrix input
31	—	No connection
32	Vdd	+5V power supply
33	—	No connection
34	—	No connection
35	—	No connection
36	—	No connection
37	CD DIRECT	
38	$\overline{\text{32k}}$	fs 32kHz indicator output
39	$\overline{\text{44k}}$	fs 44kHz indicator output
40	$\overline{\text{48k}}$	fs 48kHz indicator output
41	$\overline{\text{S.SELE}}$	Sound selector ON/OFF output
42	$\overline{\text{V.CD}}$	CD/CDV image selecting indicator output
43	$\overline{\text{V.AUX}}$	BS TUNER/AUX image selecting indicator output
44	$\overline{\text{V.VTR}}$	VTR image selecing indicator output
45	$\overline{\text{RESET}}$	Reset terminal
46	X2	Oscillator connecting terminal
47	X1	Oscillator connecting terminal
48	DAC DIRECT	DAC DIRECT control output
49	$\overline{\text{D.DAT}}$	Digital (DAT) input selecting indicator output
50	$\overline{\text{D.AUX}}$	Digital (BS TUNER/AUX) input selecting indicator output
51	$\overline{\text{D.CD}}$	Digital (CD/CDV) input selecting indicator output
52	—	
53	—	
54	$\overline{\text{AUX}}$	Analog (BS TUNER/AUX) input selecting indicator output
55	$\overline{\text{CD}}$	Analog (CD/CDV) input selecting indicator output
56	$\overline{\text{VTR}}$	VTR input selecting indicator output
57	$\overline{\text{TAPE}}$	TAPE input selecting indicator output
58	$\overline{\text{PHONO}}$	PHONO input selecting indicator output
59	$\overline{\text{TUNER}}$	TUNER input selecting indicator output
60	$\overline{\text{UP}}$	Volume up control output
61	$\overline{\text{DOWN}}$	Volume down control output
62	$\overline{\text{Vol.Ind}}$	Volume indicator output
63	DCS OUT	Computer link signal output
64	Vss	GND terminal

Other ICs

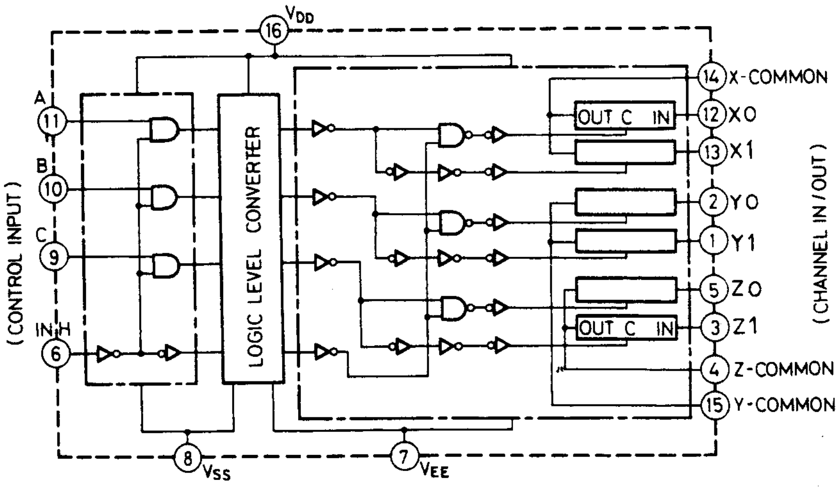
■ GP1U501 (IC102)


Amplifier
Limiter
B.P.F.
Demodu-lator
Integ-rator
Compa-rator
① GND
③ Vcc
② Vout

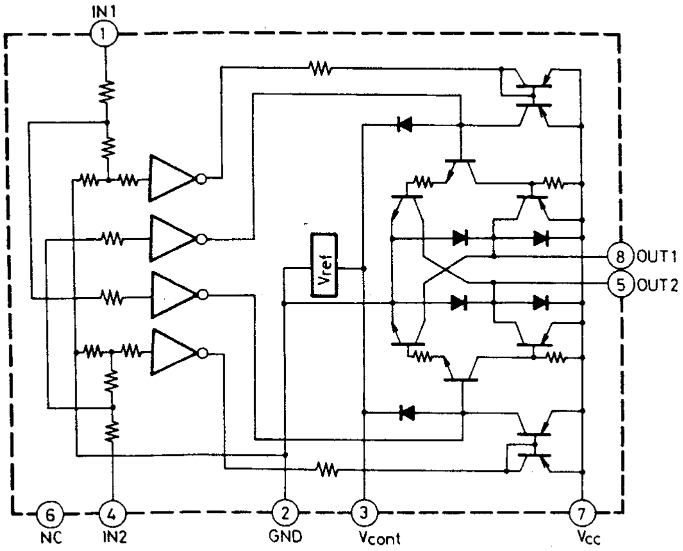
■ PCM56P (IC405)


-Vcc 1
Dig. GND 2
+VL 3
N.C. 4
CK 5
L.C. 6
DATA 7
-VL 8
16 +Vcc
15 V pot
14 MSB Adj.
13 I out
12 Ana. GND
11 S.J.
10 RF
9 V out
16 bit serial to parallel conversion
16 bit latch
16 bit current output D/A converter
level shift and control logic

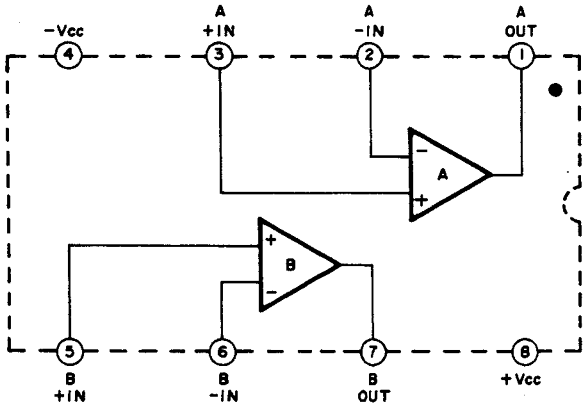
■ μPD4053BC (IC407)


16 VDD
A 11
B 10
C 9
INH 6
(CONTROL INPUT)
LOGIC LEVEL CONVERTER
OUT C IN
14 X-COMMON
12 X0
13 X1
2 Y0
1 Y1
5 Z0
3 Z1
4 Z-COMMON
15 Y-COMMON
(CHANNEL IN/OUT)
8 VSS
7 VEE

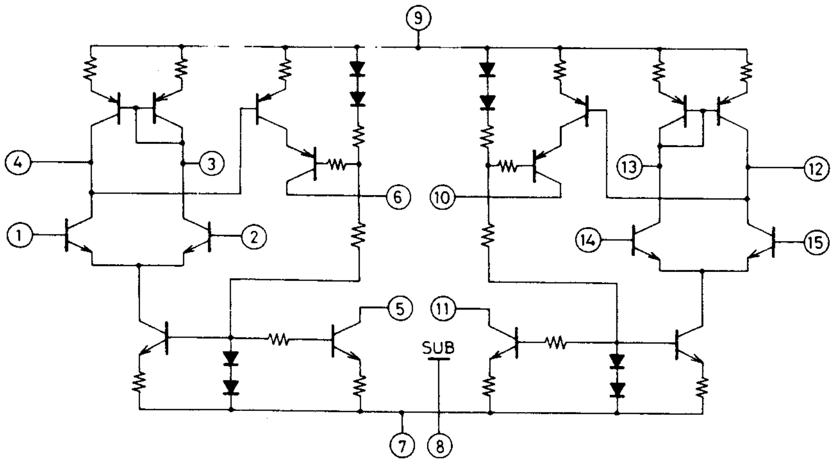
■ LB1639 (IC361)


IN1
1
Vref
8 OUT1
5 OUT2
6 NC
4 IN2
2 GND
3 Vcont
7 Vcc

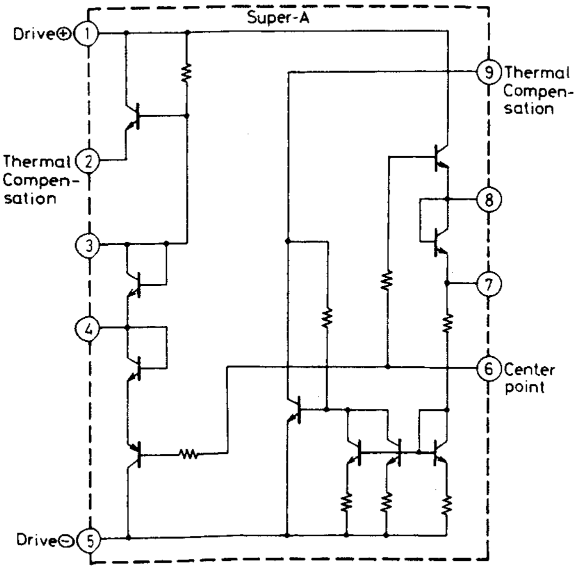
■ NJM4560DD (IC601)


-Vcc
4
A +IN
3
A -IN
2
A OUT
1
A
B
5
B +IN
6
B -IN
7
B OUT
8
+Vcc

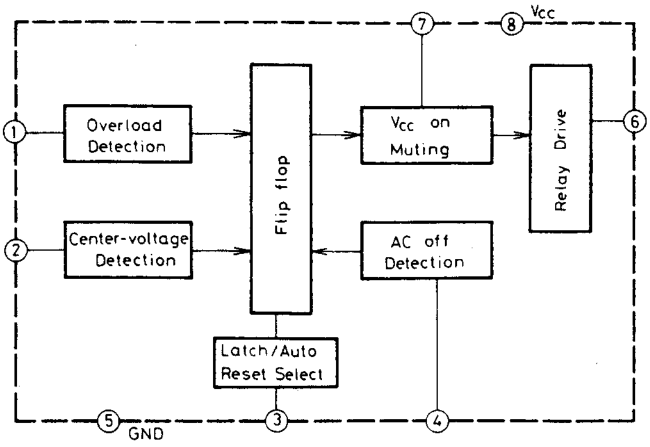
■ STK3082 III (IC701)


9
4
3
6
10
13
12
1
2
14
15
5
11
SUB
7
8

■ VC5022-2 (IC751, IC752)


Super-A
Drive⊕ 1
9 Thermal Compen-sation
Thermal Compen-sation 2
8
3
7
4
6 Center point
Drive⊖ 5

■ μPC1237HA (IC901)

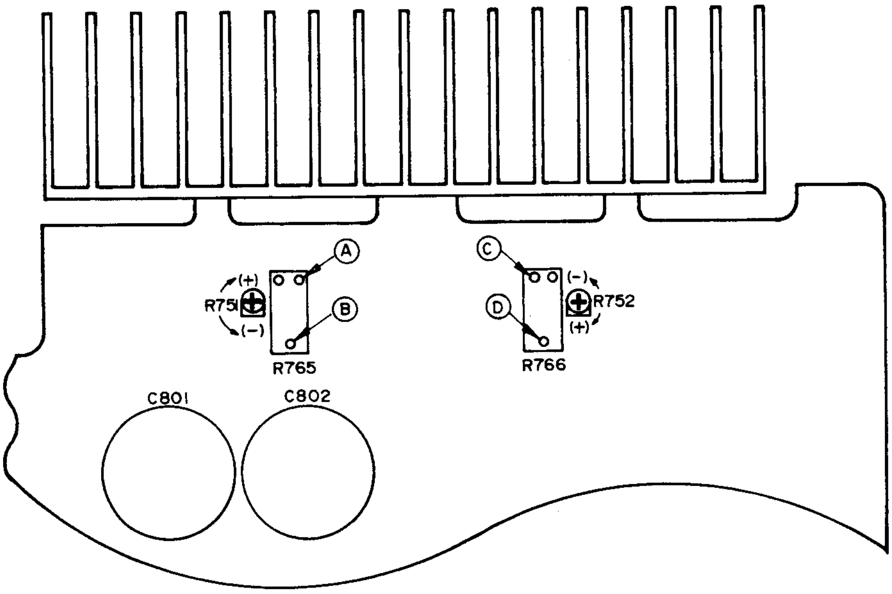

7
8 Vcc
1
Overload Detection
Flip flop
Vcc on Muting
Relay Drive
6
2
Center-voltage Detection
AC off Detection
Latch/Auto Reset Select
5 GND
3
4

Adjustment Methods

■ Adjusting The Power Amp (Idling Adjustment)

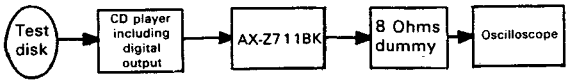
Note: When carrying out this adjustment, the probes for measuring equipment used in this adjustment as well as all containers (metal cases) should be separated from the grounding for this equipment (AX-Z711) and the grounding for other measuring equipment before carrying out adjustment.

1. Before turning on the power, turn the volume controls R751 and R752 partially attached to the power amp PC as far as possible in a counterclockwise direction.
2. Use R751 (Lch) and R752 (Rch) to adjust until the electric potential of Lch (R765 between Ⓐ and Ⓑ) and Rch (R766 between Ⓒ and Ⓓ) have the values shown below.
   Power input: after 30 seconds 8 mV
   Power input: after 10 minutes or more have elapsed: { Lch 12 mV
   Rch 12 mV

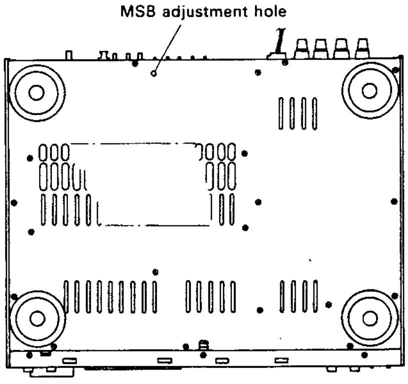


■ Adjusting the D/A Converter (MSB Adjustment)

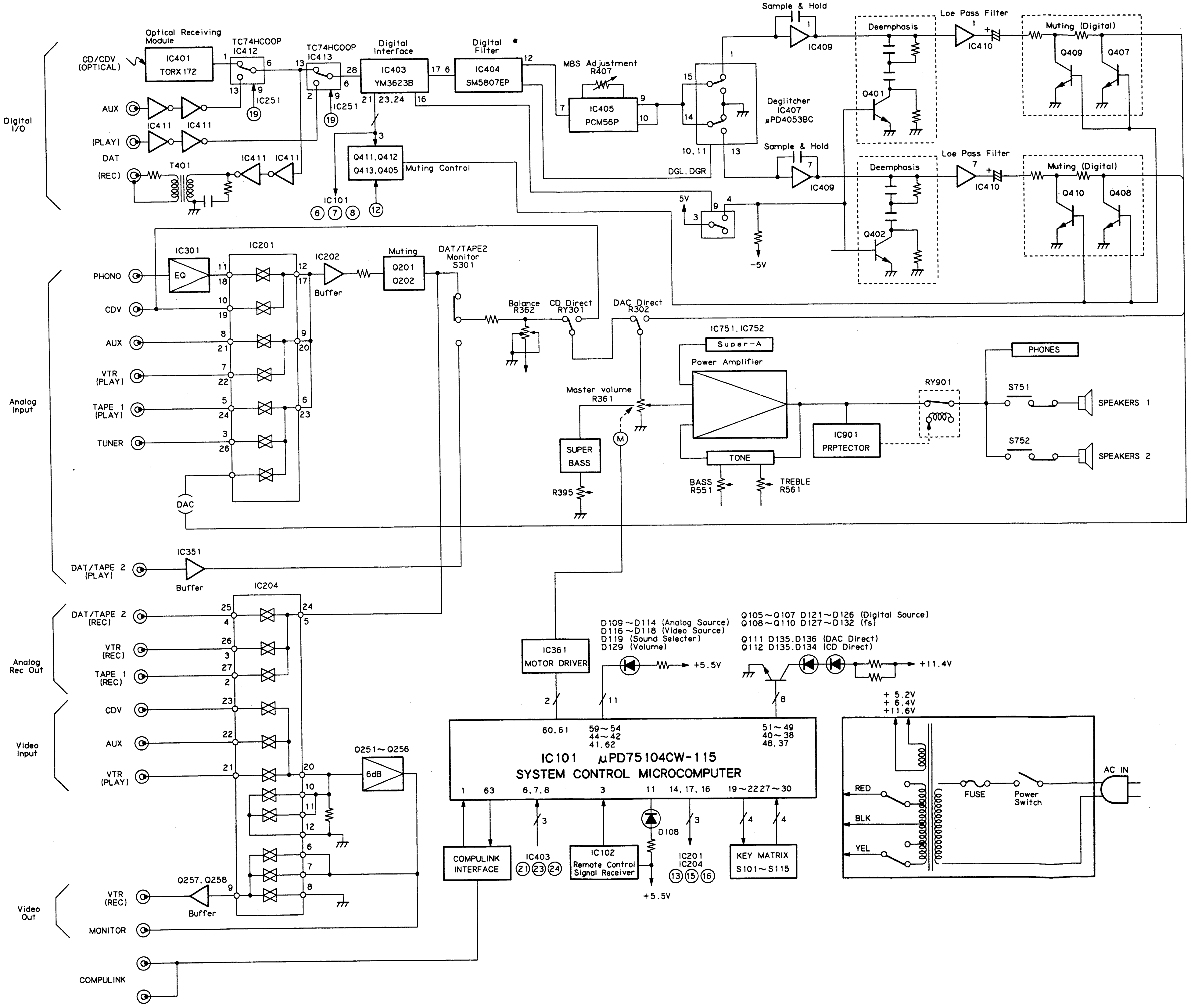
1. Connect the digital output for XL-Z511 and other equipment to the digital input terminal on this equipment.
2. Attach the 8 Ohms dummy resistance and the oscilloscope to the speaker terminal.
3. Playback the ninth number (1 kHz-60 dB) on the test disk.
4. Increase the volume on this equipment to a level at which waveforms can be observed.
5. Insert a 1.5 mm insulated flat screwdriver in the adjustment hole in the bottom and adjust R407 until the waveform is correct and there is a sine wave.



*** Use CRG1106 for the test disk.**

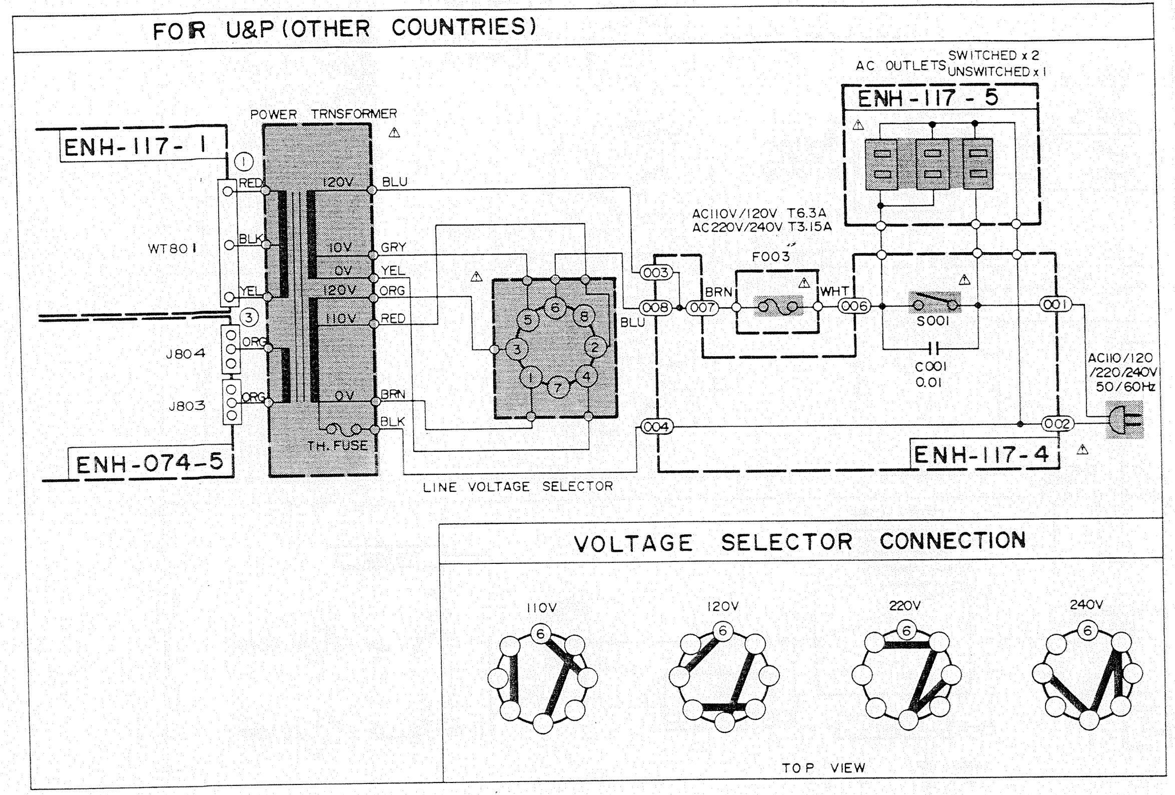


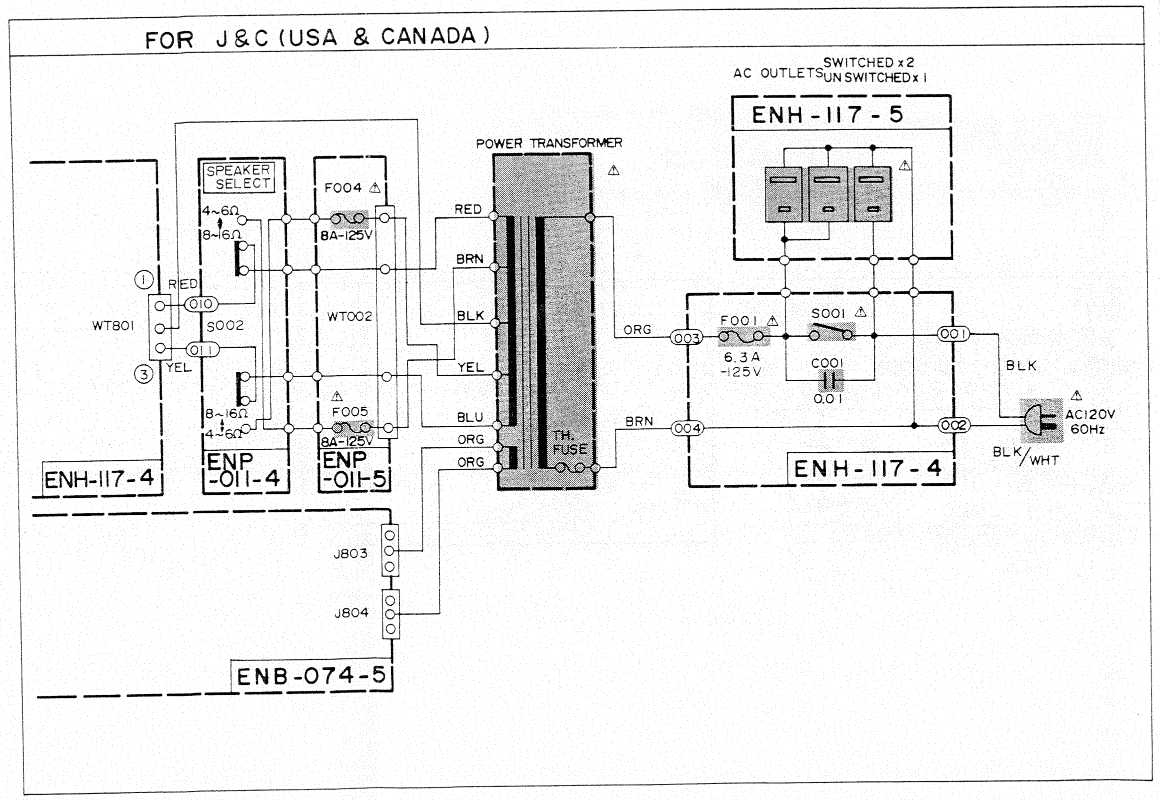
2) Block Diagram

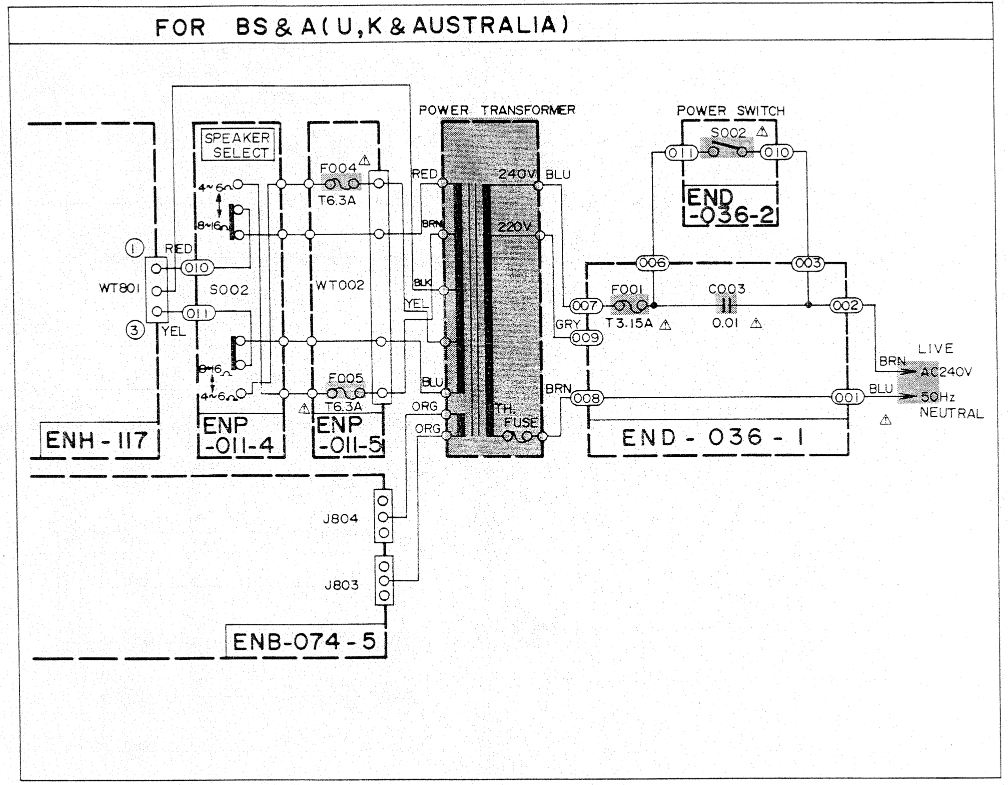

Digital I/O
CD/CDV (OPTICAL)
AUX
(PLAY) DAT (REC)
Optical Receiving Module
IC401 TORX172
IC411
T401
TC74HCOOP IC412
IC251
TC74HCOOP IC413
Digital Interface
IC403 YM3623B
Q411.Q412 Q413.Q405
Muting Control
IC101 ⑥⑦⑧
Digital Filter
IC404 SM5807EP
MBS Adjustment R407
IC405 PCM56P
Deglitcher IC407 μPD4053BC
DGL.DGR
Sample & Hold
IC409
Deemphasis
Q401
Q402
Loe Pass Filter
IC410
Muting (Digital)
Q409 Q407
Q410 Q408
5V
-5V
Analog Input
PHONO
CDV
AUX
VTR (PLAY)
TAPE 1 (PLAY)
TUNER
IC301 EQ
IC201
IC202 Buffer
Muting Q201 Q202
DAT/TAPE2 Monitor S301
Balance R362
CD Direct RY301
DAC Direct R302
DAC
IC751.IC752 Super-A
Power Amplifier
Master volume R361
SUPER BASS R395
TONE
BASS R551
TREBLE R561
IC901 PRPTECTOR
RY901
PHONES
S751 SPEAKERS 1
S752 SPEAKERS 2
DAT/TAPE 2 (PLAY)
IC351 Buffer
Analog Rec Out
DAT/TAPE 2 (REC)
VTR (REC)
TAPE 1 (REC)
IC204
Video Input
CDV
AUX
VTR (PLAY)
Q251~Q256 6dB
Video Out
VTR (REC)
MONITOR
Q257.Q258 Buffer
COMPULINK
IC361 MOTOR DRIVER
D109~D114 (Analog Source)
D116~D118 (Video Source)
D119 (Sound Selecter)
D129 (Volume)
+5.5V
Q105~Q107 D121~D126 (Digital Source)
Q108~Q110 D127~D132 (fs)
Q111 D135.D136 (DAC Direct)
Q112 D135.D134 (CD Direct)
+11.4V
IC101 μPD75104CW-115
SYSTEM CONTROL MICROCOMPUTER
60.61 59~54 44~42 41.62 51~49 40~38 48.37
1 63 6.7.8 3 11 14.17.16 19~22 27~30
COMPULINK INTERFACE
IC403 ㉑㉓㉔
IC102 Remote Control Signal Receiver
D108
+5.5V
IC201 IC204 ⑬⑮⑯
KEY MATRIX S101~S115
+5.2V +6.4V +11.6V
RED
BLK
YEL
FUSE
Power Switch
AC IN

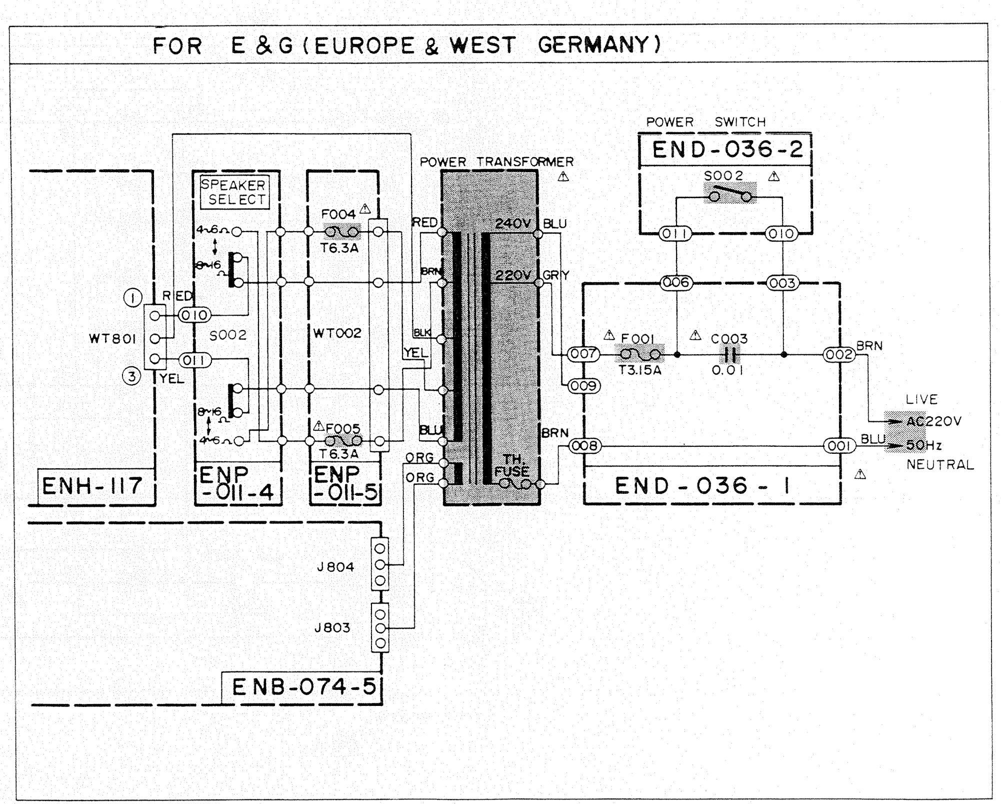
Shematic diagrams

■ Power Supply Section

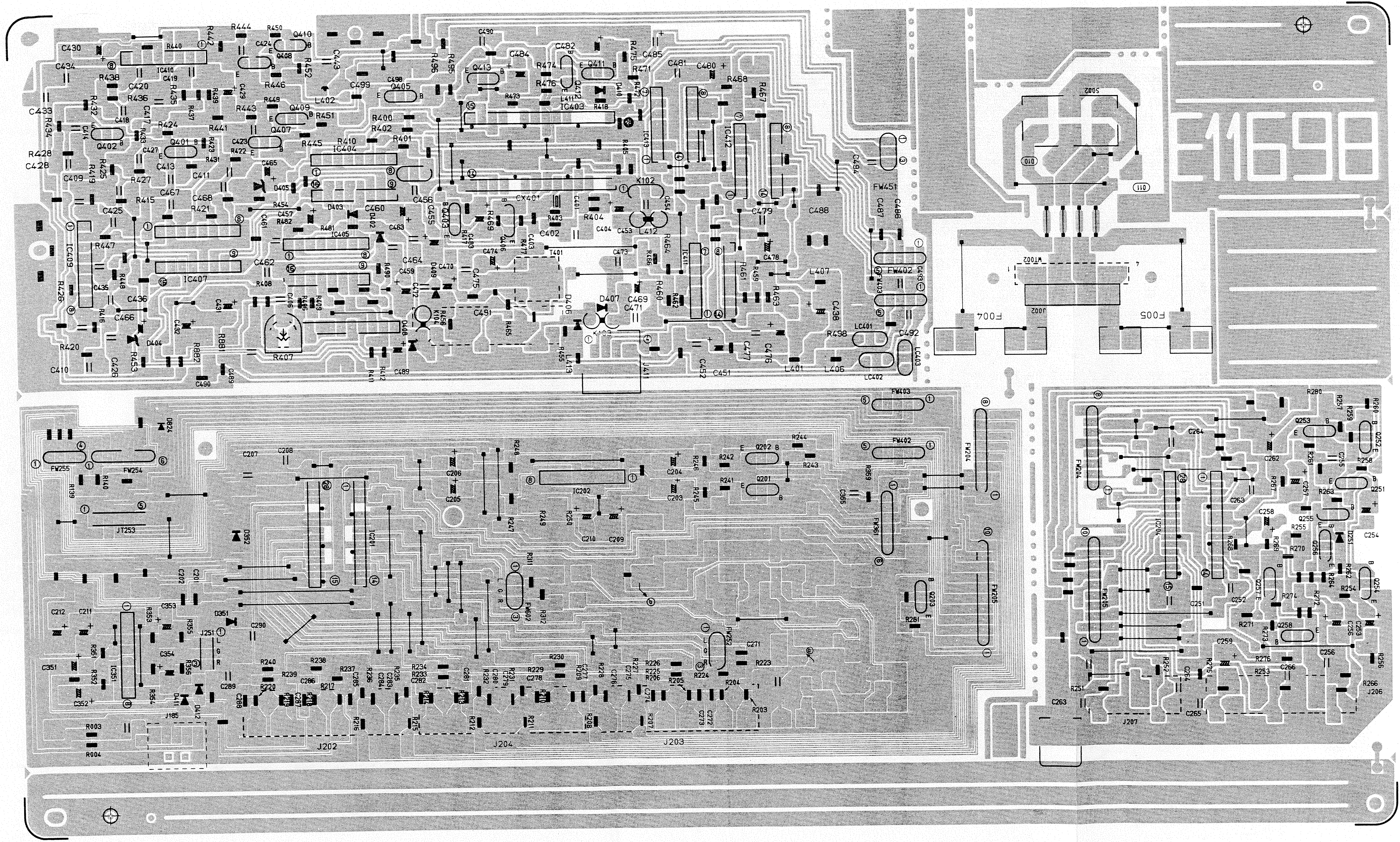

FOR U&P (OTHER COUNTRIES)
ENH-117-1
POWER TRNSFORMER
WT801
J804
J803
ENH-074-5
RED
BLK
YEL
ORG
120V
10V
0V
120V
110V
0V
BLU
GRY
YEL
ORG
RED
BRN
BLK
TH. FUSE
LINE VOLTAGE SELECTOR
AC OUTLETS SWITCHED x 2 UNSWITCHED x 1
ENH-117-5
AC110V/120V T6.3A
AC220V/240V T3.15A
F003
BRN
WHT
S001
C001
0.01
003
008
007
006
001
004
002
ENH-117-4
AC110/120/220/240V 50/60Hz
VOLTAGE SELECTOR CONNECTION
110V
120V
220V
240V
TOP VIEW


FOR J&C (USA & CANADA)
WT801
RED
YEL
SPEAKER SELECT
4~6Ω
8~16Ω
S002
010
011
F004
8A-125V
WT002
F005
8A-125V
ENH-117-4
ENP-011-4
ENP-011-5
J803
J804
ENB-074-5
POWER TRANSFORMER
RED
BRN
BLK
YEL
BLU
ORG
ORG
TH. FUSE
AC OUTLETS SWITCHED x2 UNSWITCHED x 1
ENH-117-5
F001
6.3A -125V
S001
C001
0.01
003
004
001
002
ORG
BRN
BLK
AC120V 60Hz
BLK/WHT
ENH-117-4

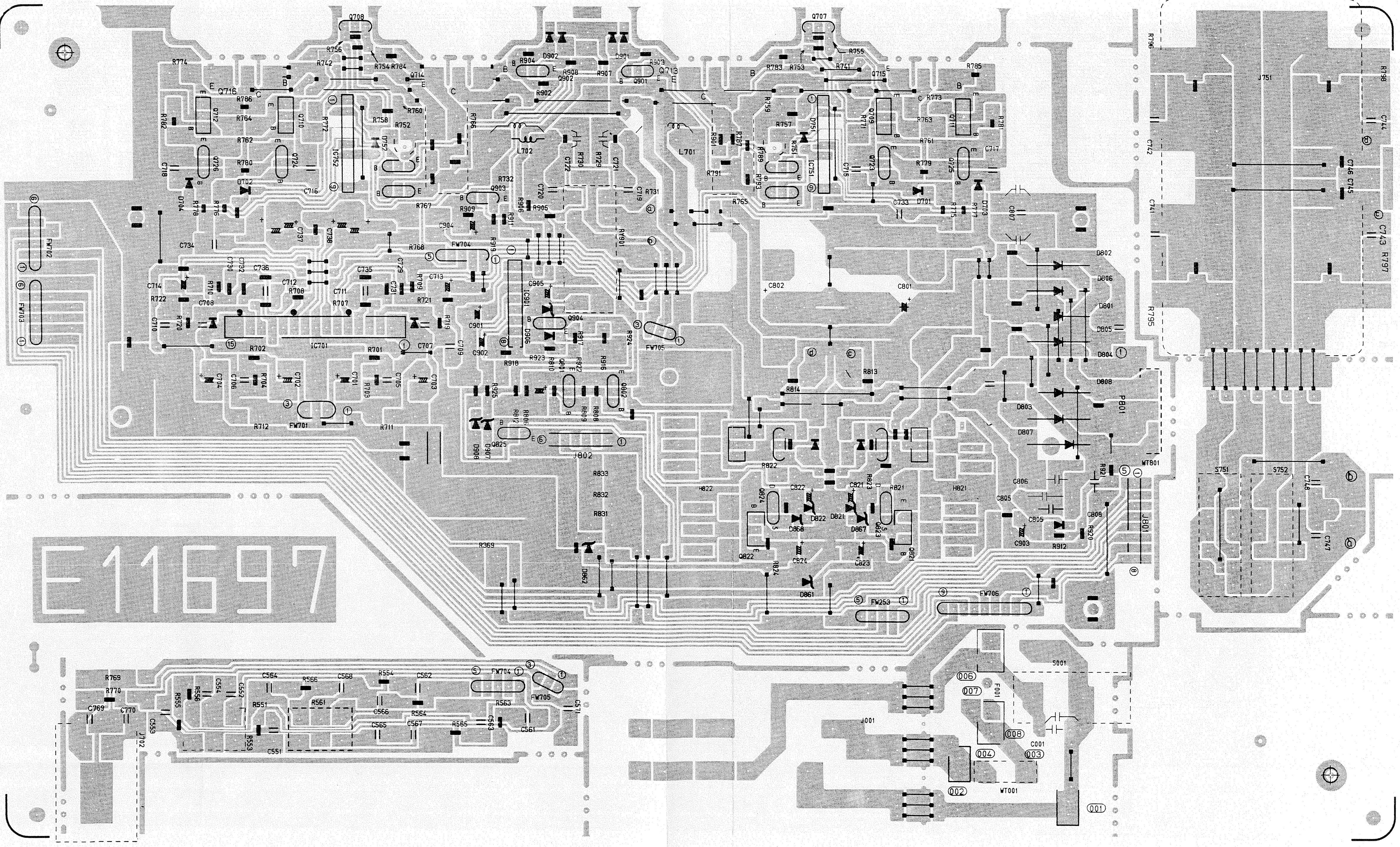

FOR BS&A (U,K & AUSTRALIA)
SPEAKER SELECT
4~6Ω
8~16Ω
F004
T6.3A
WT002
S002
F005
T6.3A
WT801
RED
YEL
010
011
ENH-117
ENP-011-4
ENP-011-5
J804
J803
ENB-074-5
POWER TRANSFORMER
RED
BRN
BLK
YEL
BLU
ORG
ORG
240V
220V
BLU
GRY
BRN
TH. FUSE
POWER SWITCH
S002
011
010
END-036-2
006
003
007
009
008
F001
T3.15A
C003
0.01
002
001
LIVE
BRN
AC240V
BLU
50Hz
NEUTRAL
END-036-1


FOR E&G (EUROPE & WEST GERMANY)
SPEAKER SELECT
4~6Ω
8~16Ω
F004
T6.3A
WT002
S002
F005
T6.3A
WT801
RED
YEL
010
011
ENH-117
ENP-011-4
ENP-011-5
J804
J803
ENB-074-5
POWER TRANSFORMER
RED
BRN
BLK
YEL
BLU
ORG
ORG
240V
220V
BLU
GRY
BRN
TH. FUSE
POWER SWITCH
END-036-2
S002
011
010
006
003
007
009
008
F001
T3.15A
C003
0.01
002
001
BRN
LIVE
AC220V
BLU
50Hz
NEUTRAL
END-036-1

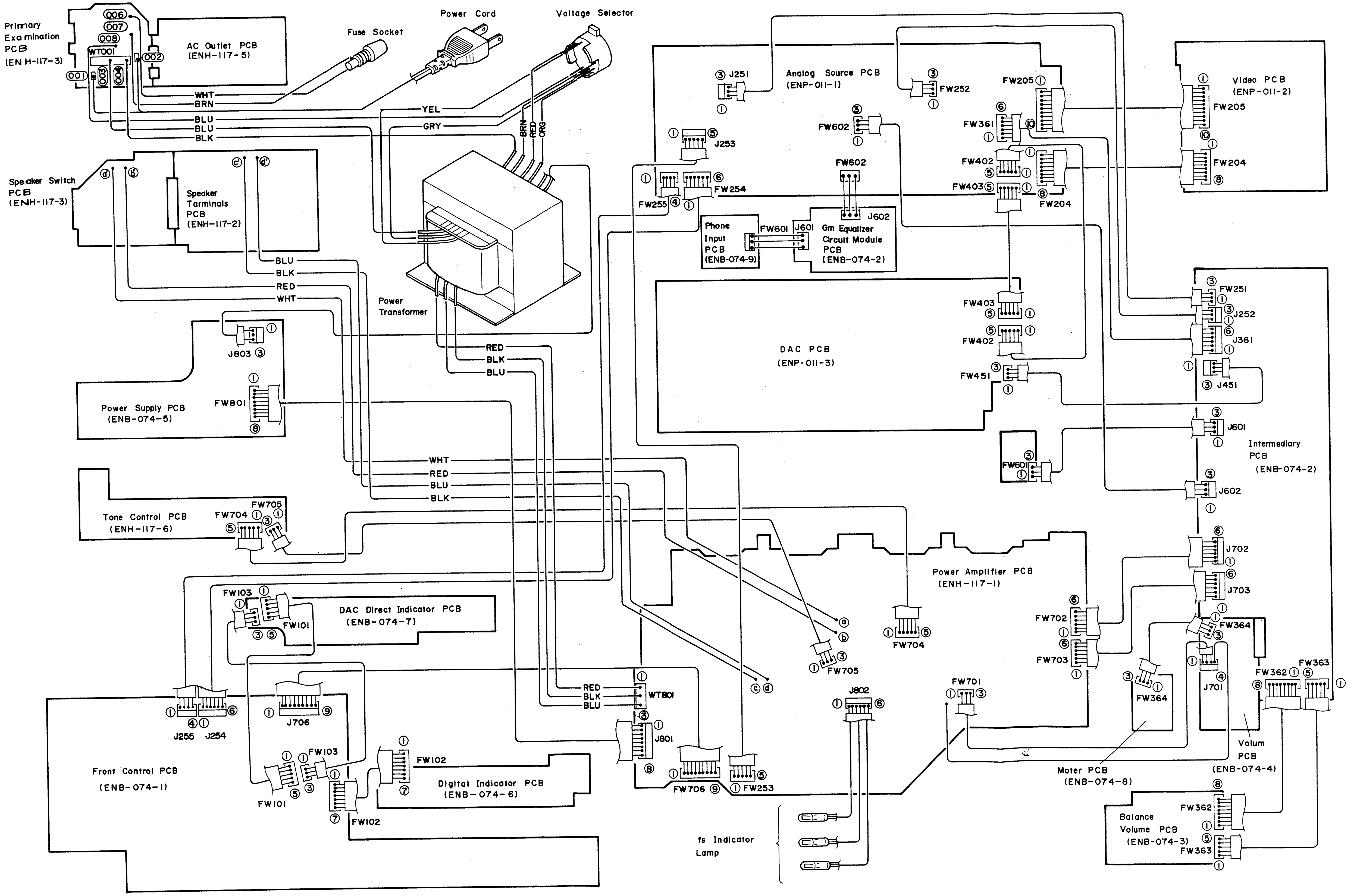
(2) ■ ENP-011 □ D/A Source PC Board Ass'y



(3) ■ ENH-117 □ Power Amplifer PC Board Ass'y

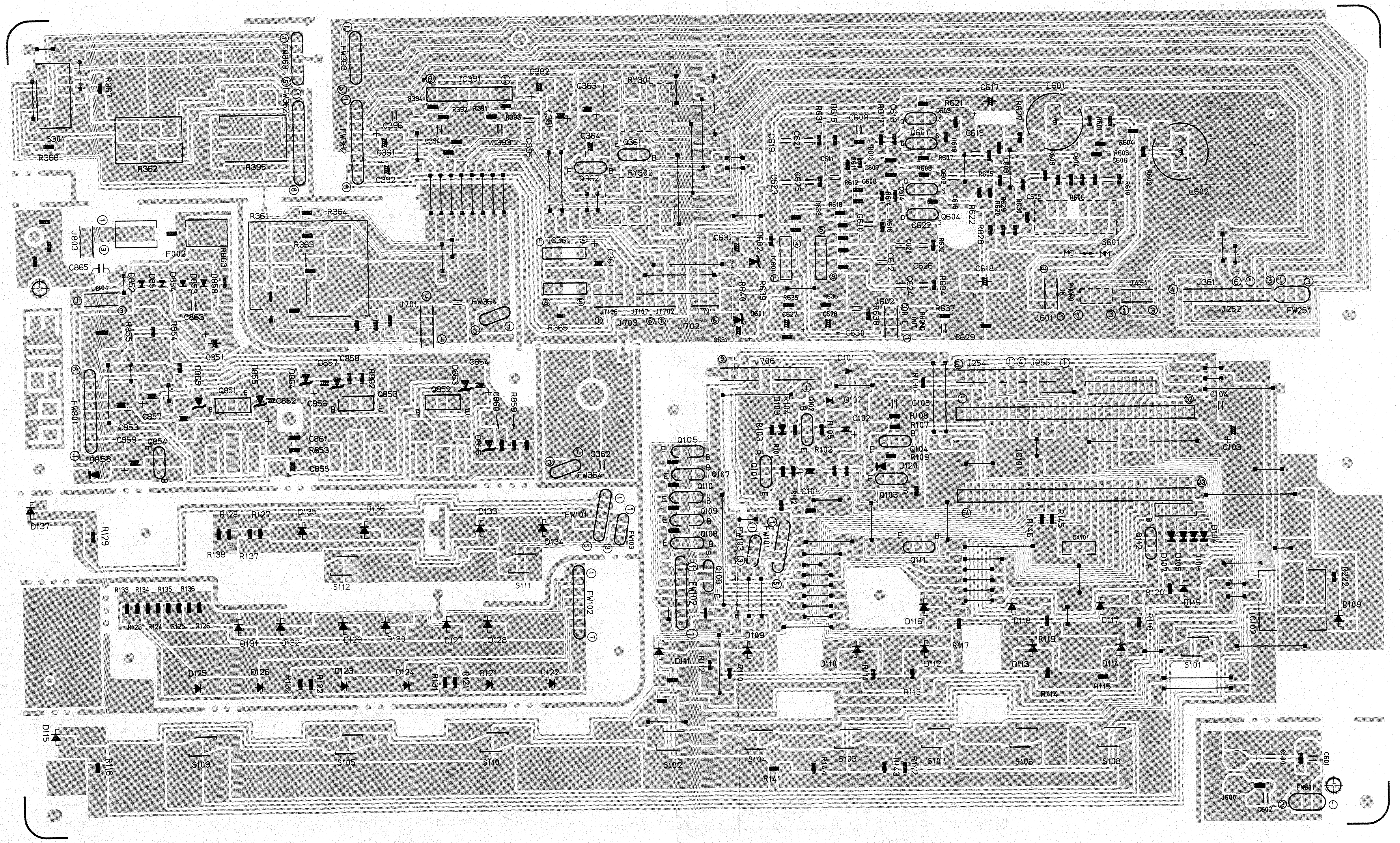

E11697
Q708
Q707
Q716
Q715
Q713
Q714
Q712
Q710
Q711
Q724
Q725
Q726
Q723
IC752
IC751
IC701
IC901
L702
L701
D902
D901
D702
D701
D704
D703
Q901
Q902
Q903
Q904
Q825
Q822
Q821
Q824
Q823
FW701
FW702
FW703
FW704
FW705
FW706
FW253
J751
J802
J801
J001
J702
P801
S751
S752
S001
F001
WT801
WT001
C801
C802
D801
D802
D803
D804
D805
D806
D807
D808
D861
D862
C001
R795
R796
R797
R798
C741
C742
C743
C744
C745
C746
C747
C748

3) Connection Diagram


Primary Examination PCB (ENH-117-3)
006
007
008
WT001
001
003
004
002
AC Outlet PCB (ENH-117-5)
Fuse Socket
Power Cord
Voltage Selector
WHT
BRN
BLU
BLU
BLK
YEL
GRY
BRN
RED
ORG
Speaker Switch PCB (ENH-117-3)
ⓓ
ⓑ
ⓒ
ⓓ
Speaker Terminals PCB (ENH-117-2)
BLU
BLK
RED
WHT
Power Transformer
J803
Power Supply PCB (ENB-074-5)
FW801
RED
BLK
BLU
WHT
RED
BLU
BLK
Tone Control PCB (ENH-117-6)
FW705
FW704
FW103
FW101
DAC Direct Indicator PCB (ENB-074-7)
J255
J254
J706
FW103
FW101
FW102
FW102
Front Control PCB (ENB-074-1)
Digital Indicator PCB (ENB-074-6)
RED
BLK
BLU
WT801
J801
FW706
FW253
J251
Analog Source PCB (ENP-011-1)
FW252
FW205
J253
FW602
FW361
FW402
FW403
FW204
FW255
FW254
FW602
J602
Phone Input PCB (ENB-074-9)
FW601
J601
Gm Equalizer Circuit Module PCB (ENB-074-2)
Video PCB (ENP-011-2)
FW205
FW204
DAC PCB (ENP-011-3)
FW403
FW402
FW451
FW251
J252
J361
J451
J601
Intermediary PCB (ENB-074-2)
FW601
J602
Power Amplifier PCB (ENH-117-1)
J702
J703
FW702
FW703
FW364
FW704
FW705
ⓐ
ⓑ
ⓒ
ⓓ
J802
FW701
FW364
J701
FW362
FW363
fs Indicator Lamp
Moter PCB (ENB-074-8)
Volum PCB (ENB-074-4)
Balance Volume PCB (ENB-074-3)
FW362
FW363

4) Printed Circuit Board Ass'y

(1) ■ ENB-074 □ Front PC Board Ass'y


IC391
C382
RY301
C363
C364
Q361
Q362
RY302
R394
R392
R391
R393
C396
C391
C394
C393
C395
C381
C392
FW363
FW362
R367
S301
R368
R362
R395
R361
R364
R363
J803
F002
C865
J804
R863
D852
D851
D854
D853
D858
C863
R855
R854
C851
FW801
D855
Q851
C857
C853
C859
Q854
D858
D857
C858
R862
D856
C852
C856
Q853
C861
R853
C855
Q852
D863
C854
C860
R859
D859
J701
FW364
C362
IC361
C361
R365
J703
J702
JT106
JT107
JT702
JT701
C617
L601
R621
C603
C609
C615
Q601
Q602
Q603
Q604
C622
C619
C621
C623
C625
R631
R633
R618
R616
R622
R629
C605
R605
R610
R602
L602
S601
MC
MM
C632
D602
IC601
R640
R639
D601
C631
C626
C624
R634
C618
R635
R636
C627
C628
R638
J602
C630
R637
C629
J601
J451
J361
J252
FW251
J706
D101
D102
D103
R104
Q102
R105
C102
R103
Q101
C101
R102
R130
C105
R108
R107
Q104
R109
D120
Q103
J254
J255
C104
C103
IC101
Q105
Q107
Q110
Q109
Q108
Q106
FW102
FW103
FW101
Q111
Q112
CX101
R145
R146
D104
D105
D106
D107
R120
D119
R222
D108
IC102
D116
D118
D117
R119
R118
D109
D111
R112
R110
D110
R111
D112
R117
D113
D114
R115
S101
R113
R114
D137
R129
R128
R127
D135
D136
D133
D134
R138
R137
S112
S111
R133
R134
R135
R136
R123
R124
R125
R126
D131
D132
D129
D130
D127
D128
D125
D126
R132
R122
D123
D124
R131
R121
D121
D122
D115
R116
S109
S105
S110
S102
S104
R141
R144
S103
R143
R142
S107
S106
S108
C600
C601
J600
C602
FW601

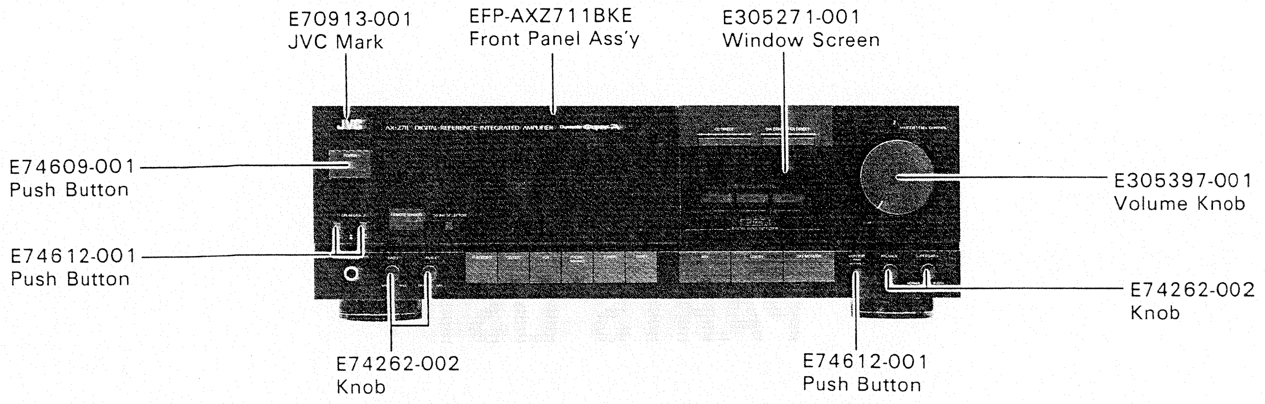
PARTS LIST

Contents

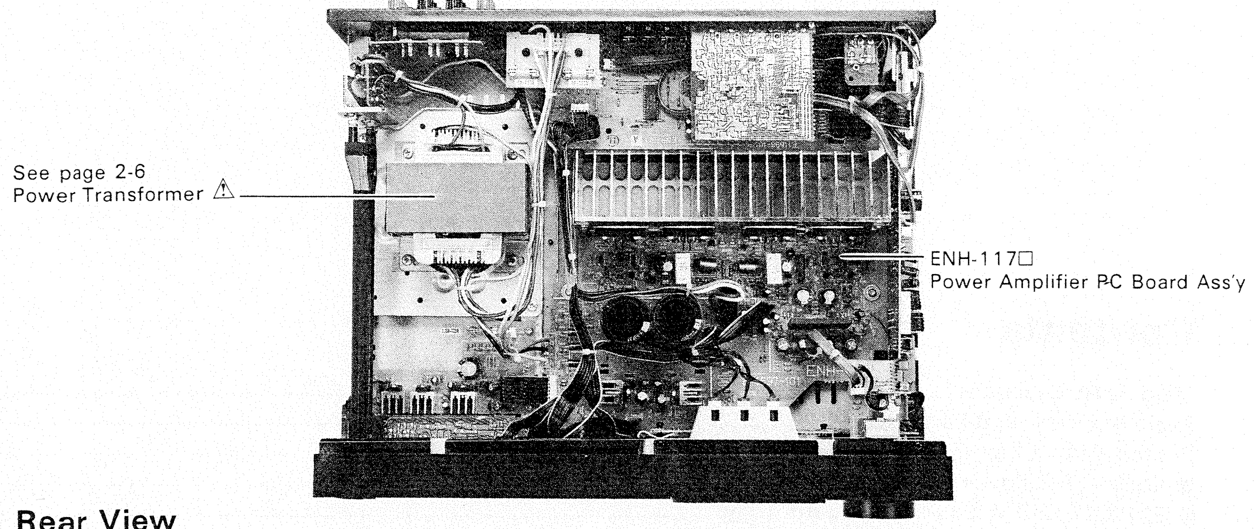
Main Parts Locations 2-2
Exploded View and Parts List 2-3
Printed Circuit Board Ass'y and Parts List 2-7
■ ENH-117 □ Power Amplifier PC Board Ass'y 2-7
■ ENP-011 □ D/A Source PC Board Ass'y 2-11
■ ENB-074 □ Front PC Board Ass'y 2-15
Accessories List 2-18
Packing Materials and Parts Numbers 2-19

Main Parts Location

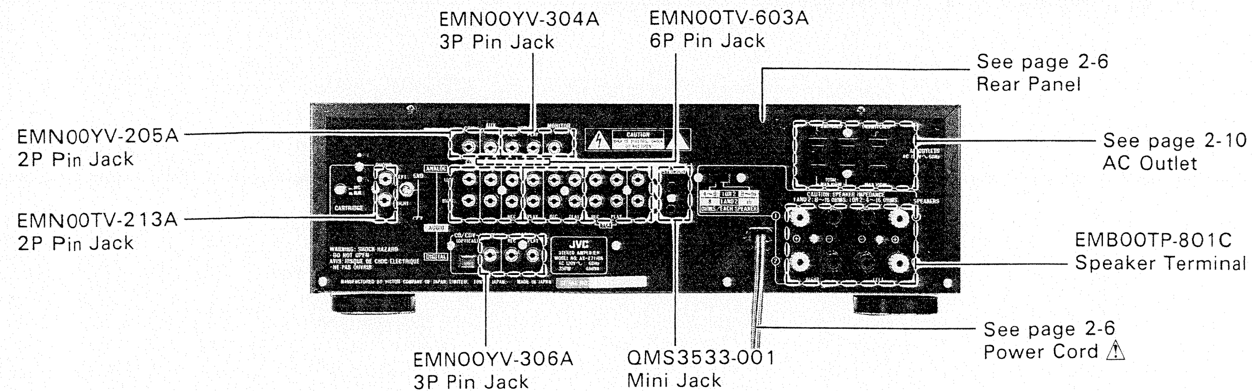
■ Front view


E70913-001
JVC Mark
EFP-AXZ711BKE
Front Panel Ass'y
E305271-001
Window Screen
E74609-001
Push Button
E305397-001
Volume Knob
E74612-001
Push Button
E74262-002
Knob
E74262-002
Knob
E74612-001
Push Button

■ Top view

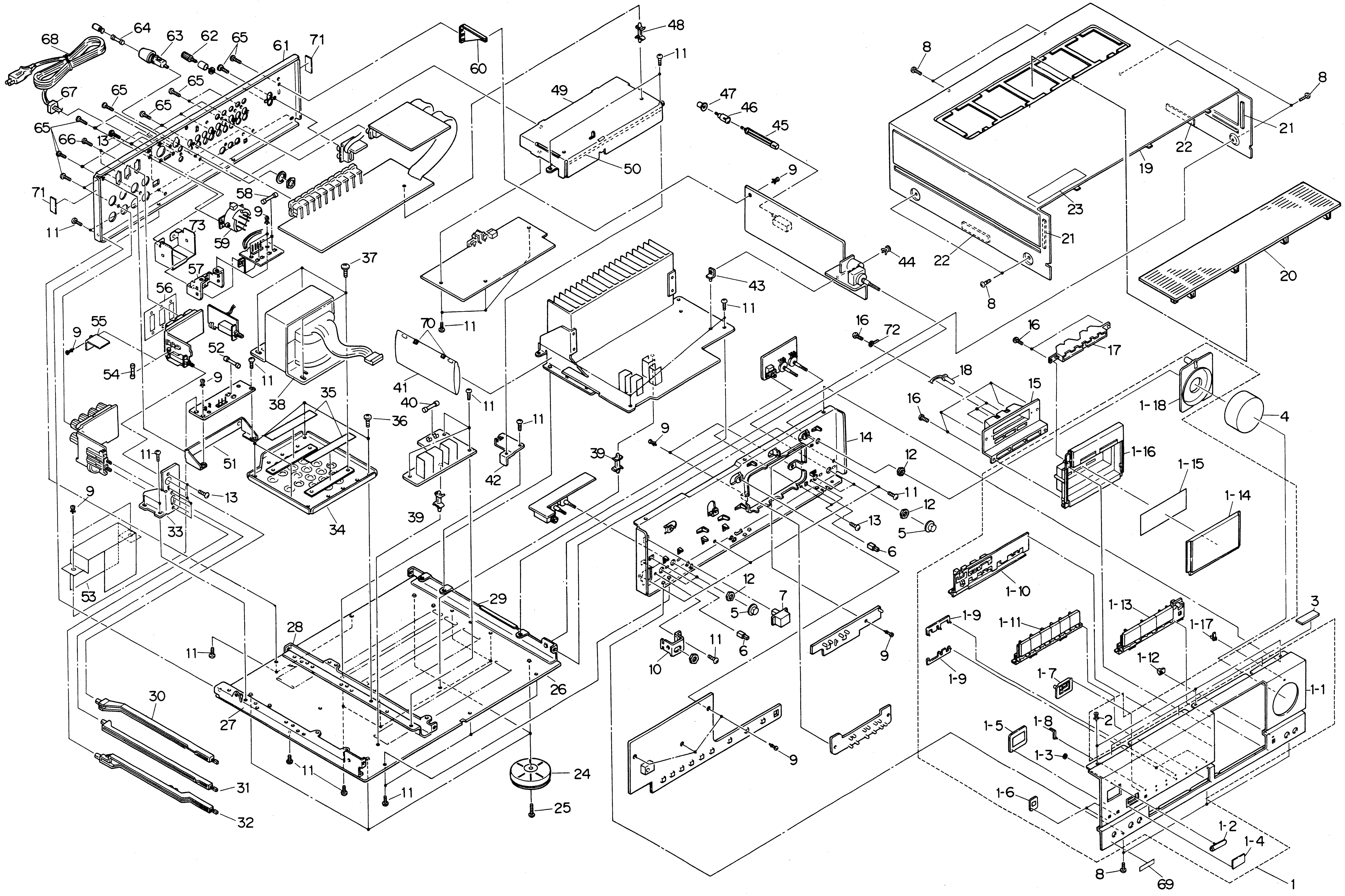

See page 2-6
Power Transformer ⚠
ENH-117□
Power Amplifier P.C Board Ass'y

■ Rear View


EMN00YV-304A
3P Pin Jack
EMN00TV-603A
6P Pin Jack
See page 2-6
Rear Panel
EMN00YV-205A
2P Pin Jack
See page 2-10
AC Outlet
EMN00TV-213A
2P Pin Jack
EMB00TP-801C
Speaker Terminal
See page 2-6
Power Cord ⚠
EMN00YV-306A
3P Pin Jack
QMS3533-001
Mini Jack

⚠ : Safety Parts

Exploded View and Parts List


68
64
63
62
65
61
71
60
48
11
49
50
47
46
45
9
8
8
21
22
19
23
21
22
8
20
67
65
65
65
65
66
13
71
11
58
9
73
59
57
56
55
9
54
52
9
11
37
38
35
34
36
70
11
41
40
11
39
42
11
43
11
44
16
72
16
17
18
15
16
1-18
4
1-16
1-15
1-14
14
12
11
12
5
6
13
9
39
51
11
13
9
33
53
29
28
27
26
11
11
11
11
24
25
30
31
32
12
5
7
6
11
10
9
9
1-10
1-9
1-11
1-9
1-13
1-17
1-12
3
1-1
1-7
2
1-5
1-8
1-3
1-6
1-2
1-4
8
69
1

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
	1	EFP-AXZ711BKE	Front Panel Ass'y	1		
	1-1	E25954-003	Front Panel	1		
	1-2	E70913-001	JVC Mark	1		
	1-3	E60912-003	Speed Nut	1		
	1-4	E74248-003	Plate	1	Remocon	
	1-5	E74610-001	Push Button Escutcheon	1	Power	
	1-6	E74613-001	Push Button Escutcheon	2	Speaker Switch	
	1-7	E74250-002	Remocon Escutcheon	1		
	1-8	E74616-001	Indicator	1		
	1-9	E74614-001	Indicator	3		
	1-10	E305309-001	L.E.D Escutcheon	1		
	1-11	E305511-002	Push Button Ass'y	1		
	1-12	E74622-001	Indicator	1		
	1-13	E305512-002	Push Button Ass'y	1		
	1-14	E305271-001	Window Screen	1		
	1-15	E74619-003	Sheet	1		
	1-16	E25956-002	Front Escutcheon Ass'y	1		
	1-17	E74621-001	Indicator	1		
	1-18	E304949-002	Knob Ring	1		
	2	E48729-009	Plastic Rivet	3		
	3	EXO040007N30S02	Felt Spacer	3		
	4	E305397-001	Volume Knob	1		
	5	E74262-002	Knob	4		
	6	E74612-001	Push Button	3		
	7	E74609-001	Push Button	1	Power	
	8	SDSE3008M	Screw	9		
	9	E48729-008	Plastic Rivet	9		J, C
		E48729-008	Plastic Rivet	10		U, P, PG
		E48729-008	Plastic Rivet	12		E, EF, A, G, BS
	10	E74706-002	Hed Phone Bracket	1		
	11	SBSE3008CC	Screw	30		Except E, EF, A, G, BS
		SBSE3008CC	Screw	31		E, EF, A, G, BS
	12	E71862-001	Volume Nut	5		
	13	SBST3006CC	Screw	8		Except U, P, PG
		SBST3006CC	Screw	6		U, P, PG
	14	E11691-002	Front Bracket	1		
	15	E26014-001	Lamp House	1		
	16	SBSF3010CC	Screw	7		
	17	E305270-001	L.E.D Holder	1		
	18	ELP3104-B075C	Pilot Lamp	3		
	19	E25959-001	Metal Cover	1		Except E, EF, BS
		E26070-001	Metal Cover	1		E, EF, BS
	20	E23862-005	Grill	1		E, EF, BS
	21	EXO100008R20S10	Felt Spacer	2		
	22	EXO075010R30S10	Spacer	2		
	23	E67000-005	Caution Label	1		
	24	E74522-001	Foot Ass'y	4		
	25	E61661-005	Special Screw	4		
	26	E11690-002	Bottom Plate	1		J, C, U, P, PG
		E11690-003	Bottom Plate	1		E, EF, A, G, BS
	27	E304889-004	Side Bracket	1	Left	
	28	E304890-005	Center Bracket	1		
	29	E304891-006	Side Bracket	1	Right	
	30	E305274-001	Push Shaft	1	Power	
	31	E305274-002	Push Shaft	1	Spk 1	
	32	E305274-003	Push Shaft	1	Spk 2	
	33	E305275-002	Switch Bracket	1		
	34	E305276-002	Trans Bracket	1		J, C, U, P, PG
		E305276-003	Trans Bracket	1		E, EF, A, G, BS
	35	E74317-001	Spacer	2		

⚠ : Safety Parts

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
	36	E65389-004	Special Screw	4		
	37	E65389-006	Special Screw	4		
⚠	38	ETP1200-30JA	Power Transformer	1		J, C
⚠		ETP1200-30FA	Power Transformer	1		U, P, PG
⚠		ETP1200-30EA	Power Transformer	1		E, EF, A, G
⚠		ETP1200-30EABS	Power Transformer	1		BS
	39	E72631-003	Fastener	2		
	40	QMF51U1-1R25	Fuse	1	F002	J, C
		QMF51A2-1R25S	Fuse	1	F002	Except J, C, BS
		QMF51E2-1R25SBS	Fuse	1	F002	BS
	41	E305602-001	Protect Cover	1		
	42	E74704-002	Bracket	1		
	43	E305403-001	Fastener	1		
	44	E48729-003	Plastic Rivet	1		
	45	E69460-002	Push Shaft	1		
	46	E66226-001	Push Shaft	1		
	47	C40755-002	Push Knob	1		
	48	E72631-004	Fastener	1		
	49	E304907-003	Shield Case	1		
	50	EXO205005N50S02	Felt Spacer	1		
⚠	51	E71074-002	Bracket	1		E, EF, A, G, BS
⚠	52	QMF51A2-3R15S	Fuse	1	F001	E, EF, A, G
		QMF51E2-3R15SBS	Fuse	1	F001	BS
⚠	53	E72922-002	Cover	1		E, EF, A, G, BS
	54	QMF51U1-6R3	Fuse	1	F001	J, C
	55	E74909-001	Protect Cover	1		U, P, PG
	56	E69589-010	Spacer	1		
	57	E74545-001	Rear Bracket	1		Except U, P, PG
⚠	58	QMF51U1-8R0	Fuse	2	F004,F005	J, C
⚠		QMF51A2-6R3S	Fuse	2	F004,F005	E, EF, A, G
⚠		QMF51E2-6R3SBS	Fuse	2	F004,F005	BS
	59	QSR0085-008U	Voltage Selector	1		U, P, PG
	60	E74705-002	Bracket	1		
	61	E25960-007	Rear Panel	1		J, C
		E25960-008	Rear Panel	1		U, P, PG
		E25960-009	Rear Panel	1		E, EF, A, G, BS
	—	E303260-150	Rating Label	1		E, EF, G
	62	E70078-001	GND. Terminal	1		
	63	QMG0301-003	Fuse Holder	1		U, P, PG
⚠	64	QMF51A2-3R15S	Fuse	1	F003	U, PG
⚠		QMF51A2-6R3S	Fuse	1	F003	P
	65	E73273-002	Screw	11		J, C
		E73273-002	Screw	13		Except J, C
	66	SDSB3008CC	Screw	2		J, C, U, P, PG
	67	QHS3771-108	Cord Stopper	1		Except BS
		QHS3771-108BS	Cord Stopper	1		BS
	68	QMP1480-200H	Power Cord	1		J, C
		QMP7600-200	Power Cord	1		U, P, PG
		QMP3900-200	Power Cord	1		E, EF, G
		QMP2560-244	Power Cord	1		A
		QMP9017-008BS	Power Cord	1		BS
	69	E49267-001	Origin Marking Label	1		BS
	70	E33754-001	Tie Band	2		
	71	EXO040010R10S	Spacer	2		
	72	E50670-003	Wire Clamp	1		
	73	E305672-001	Shield Cover	1		

⚠ : Safety Parts

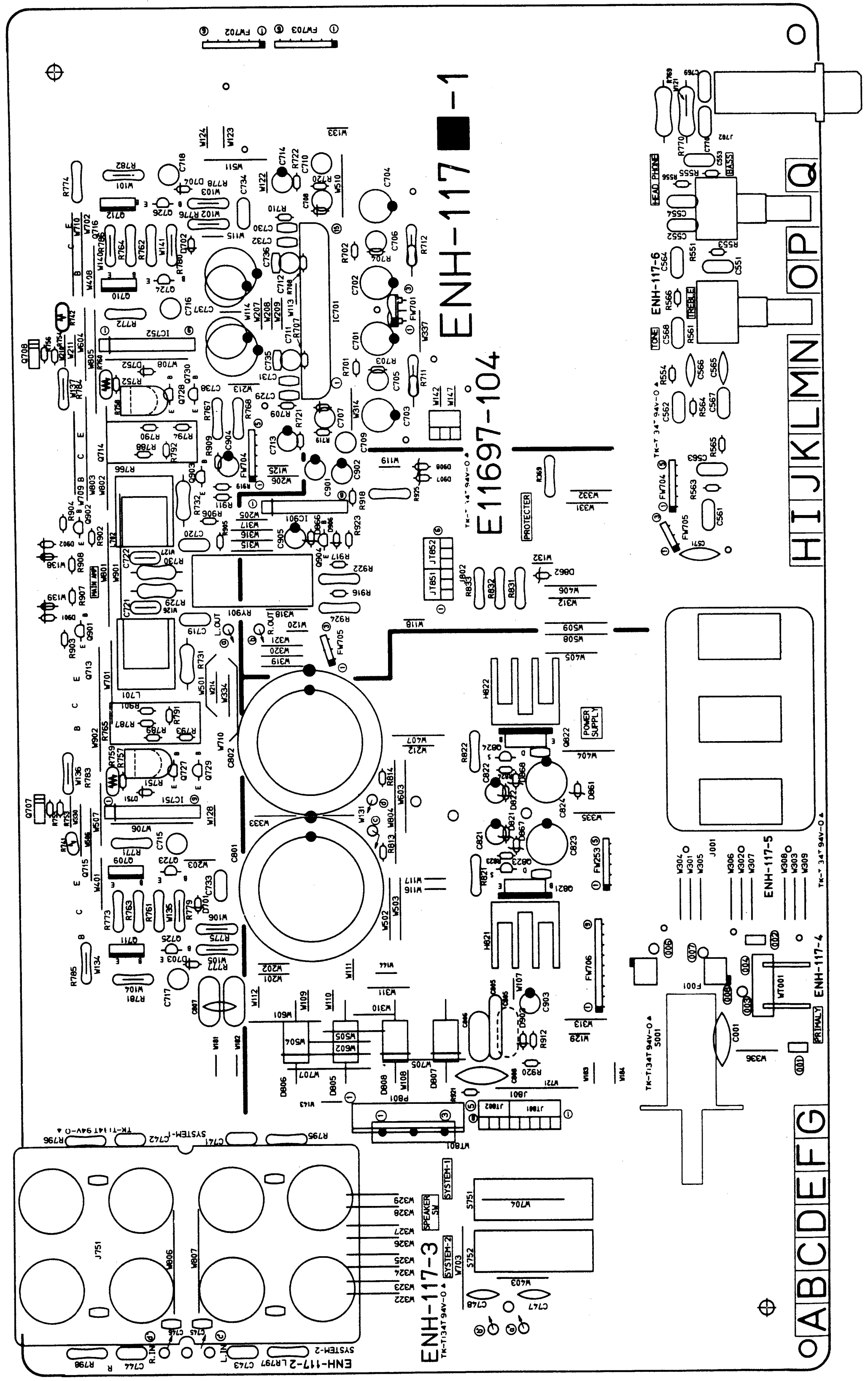
The Marks for Designated Areas

J……………………The U.S.A
C……………………Canada
P, PG……………U.S.Military Market
E, EF……………Continental Europe
A……………………Australia
G……………………West Germany
BS…………………U.K.
U……………………Other Countries
No mark indicates all areas.

Printed Circuit Board Ass'y and Parts List

■ ENH-117 □ Power Amplifer PC Board Ass'y

Note: ENH-117 □ Varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Designated Areas
ENH-117 A	The U.S.A., Canada
ENH-117 B	Continental Europe, Australia
ENH-117 C	West Germany
ENH-117 D BS	U.K.
ENH-117 E	U.S. Military Market & Other Countries

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	Q707	2SD636(Q,R)	SILICON	MATSUSHITA	
	Q708	2SD636(Q,R)	SILICON	MATSUSHITA	
	Q709	2SD669A(B,C)	SILICON	HITACHI	
	Q710	2SD669A(B,C)	SILICON	HITACHI	
	Q711	2SB649A(B,C)	SILICON	HITACHI	
	Q712	2SB649A(B,C)	SILICON	HITACHI	
	Q713	2SC3857LF(O,Y)	SILICON	SANKEN	
	Q714	2SC3857LF(O,Y)	SILICON	SANKEN	
	Q715	2SA1493LF(O,Y)	SILICON	SANKEN	
	Q716	2SA1493LF(O,Y)	SILICON	SANKEN	
	Q723	2SC2909(S,T)	SILICON	SANYO	
	Q724	2SC2909(S,T)	SILICON	SANYO	
	Q725	2SA1207(S,T)	SILICON	SANYO	
	Q726	2SA1207(S,T)	SILICON	SANYO	
	Q727	2SC2389(S,E)	SILICON	ROHM	
	Q728	2SC2389(S,E)	SILICON	ROHM	
	Q729	2SA1038(S,E)	SILICON	ROHM	
	Q730	2SA1038(S,E)	SILICON	ROHM	
	Q821	2SD2061(F,G)	SILICON	ROHM	
	Q822	2SB1187(F,G)	SILICON	ROHM	
	Q823	2SK246(Y)	F.E.T	TOSHIBA	
	Q824	2SK246(Y)	F.E.T	TOSHIBA	
	Q901	2SC2389(S,E)	SILICON	ROHM	
	Q902	2SC2389(S,E)	SILICON	ROHM	
	Q903	2SA564A(R,S)	SILICON	MATSUSHITA	
	Q904	2SA965(Y)	SILICON	TOSHIBA	

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	IC701	STK3082MK3V	I.C.	SANYO	
	IC751	VC5022-2	I.C.	SANYO	
	IC752	VC5022-2	I.C.	SANYO	
	IC901	UPC1237HA	I.C.	NEC	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	D701	1SS133	SILICON	ROHM	
	D702	1SS133	SILICON	ROHM	
	D703	1SS133	SILICON	ROHM	
	D704	1SS133	SILICON	ROHM	
	D751	1SS133	SILICON	ROHM	
	D752	1SS133	SILICON	ROHM	
	D805	30DL2FC	SILICON	NIHONINTER	
	D806	30DL2FC	SILICON	NIHONINTER	
	D807	30DL2FC	SILICON	NIHONINTER	
	D808	30DL2FC	SILICON	NIHONINTER	
	D821	RD15JSB3	ZENER	NEC	
	D822	RD15JSB3	ZENER	NEC	
	D861	MTZ18JC	ZENER	ROHM	
	D862	MTZ18JC	ZENER	ROHM	
	D867	MTZ8.2JC	ZENER	ROHM	A
	D868	MTZ8.2JC	ZENER	ROHM	A
	D901	1SS133	SILICON	ROHM	
	D902	1SS133	SILICON	ROHM	
	D903	1SS133	SILICON	ROHM	
	D906	MTZ16JC	ZENER	ROHM	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	D907	MTZ27JC	ZENER	ROHM	
	D908	MTZ27JC	ZENER	ROHM	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C001	QCZ9038-103	0.01MF	AC250V	CERAMIC	A
	C001	QCZ9038-103	0.01MF	AC250V	CERAMIC	E
	C551	QFN81HK-153	0.015MF	50V	MYLAR	
	C552	QFN81HK-153	0.015MF	50V	MYLAR	
	C553	QFN81HK-823	0.082MF	50V	MYLAR	
	C554	QFN81HK-823	0.082MF	50V	MYLAR	
	C561	QFN81HK-332	3300PF	50V	MYLAR	
	C562	QFN81HK-332	3300PF	50V	MYLAR	
	C563	QFN81HK-183	0.018MF	50V	MYLAR	
	C564	QFN81HK-183	0.018MF	50V	MYLAR	
	C565	QCS21HJ-221	220PF	50V	CERAMIC	
	C566	QCS21HJ-221	220PF	50V	CERAMIC	
	C567	QFN81HK-122	1200PF	50V	MYLAR	
	C568	QFN81HK-122	1200PF	50V	MYLAR	
	C571	QCS21HJ-223	0.022MF	50V	CERAMIC	
	C701	EEZ1005-106	10MF	100V	ELECTRO	
	C702	EEZ1005-106	10MF	100V	ELECTRO	
	C703	EEZ5003-107	100MF	50V	ELECTRO	
	C704	EEZ5003-107	100MF	50V	ELECTRO	
	C705	QFS81HJ-101	100PF	50V	POLYSTYROL	
	C706	QFS81HJ-101	100PF	50V	POLYSTYROL	
	C707	QFS81HJ-680	68PF	50V	POLYSTYROL	
	C708	QFS81HJ-680	68PF	50V	POLYSTYROL	
	C709	QFS81HJ-120	12PF	50V	POLYSTYROL	
	C710	QFS81HJ-120	12PF	50V	POLYSTYROL	
	C711	QFS81HJ-361	360PF	50V	POLYSTYROL	
	C712	QFS81HJ-361	360PF	50V	POLYSTYROL	
	C713	QETB1HM-474	0.47MF	50V	ELECTRO	
	C714	QETB1HM-474	0.47MF	50V	ELECTRO	
	C715	QFS82BJ-220	22PF	125V	POLYSTYROL	
	C716	QFS82BJ-220	22PF	125V	POLYSTYROL	
	C717	QFS82BJ-220	22PF	125V	POLYSTYROL	
	C718	QFS82BJ-220	22PF	125V	POLYSTYROL	
	C719	QFV81HJ-104	0.1MF	50V	T.FILM	B
	C719	QFV81HJ-104	0.1MF	50V	T.FILM	C
	C719	QFV81HJ-104	0.1MF	50V	T.FILM	DBS
	C719	QFV81HJ-104	0.1MF	50V	T.FILM	E
	C719	QFV81HJ-473	0.047MF	50V	T.FILM	A
	C720	QFV81HJ-104	0.1MF	50V	T.FILM	B
	C720	QFV81HJ-104	0.1MF	50V	T.FILM	C
	C720	QFV81HJ-104	0.1MF	50V	T.FILM	DBS
	C720	QFV81HJ-104	0.1MF	50V	T.FILM	E
	C720	QFV81HJ-473	0.047MF	50V	T.FILM	A
	C721	QFV81HJ-104	0.1MF	50V	T.FILM	B
	C721	QFV81HJ-104	0.1MF	50V	T.FILM	C
	C721	QFV81HJ-104	0.1MF	50V	T.FILM	DBS
	C721	QFV81HJ-104	0.1MF	50V	T.FILM	E
	C722	QFV81HJ-104	0.1MF	50V	T.FILM	B
	C722	QFV81HJ-104	0.1MF	50V	T.FILM	C
	C722	QFV81HJ-104	0.1MF	50V	T.FILM	DBS
	C722	QFV81HJ-104	0.1MF	50V	T.FILM	E
	C729	QCSB1HJ-680	68PF	50V	CERAMIC	
	C730	QCSB1HJ-680	68PF	50V	CERAMIC	
	C731	QCSB1HJ-220	22PF	50V	CERAMIC	
	C732	QCSB1HJ-220	22PF	50V	CERAMIC	
	C733	QFV81HJ-473	0.047MF	50V	T.FILM	
	C734	QFV81HJ-473	0.047MF	50V	T.FILM	
	C735	QCSB1HJ-680	68PF	50V	CERAMIC	
	C736	QCSB1HJ-680	68PF	50V	CERAMIC	
	C737	QETB1JM-476	47MF	63V	ELECTRO	B
	C737	QETB1JM-476	47MF	63V	ELECTRO	C
	C737	QETB1JM-476	47MF	63V	ELECTRO	DBS
	C737	QETB1JM-476	47MF	63V	ELECTRO	E
	C737	QETB2AM-476	47MF	100V	ELECTRO	A
	C738	QETB1JM-476	47MF	63V	ELECTRO	B
	C738	QETB1JM-476	47MF	63V	ELECTRO	C
	C738	QETB1JM-476	47MF	63V	ELECTRO	DBS
	C738	QETB1JM-476	47MF	63V	ELECTRO	E
	C738	QETB2AM-476	47MF	100V	ELECTRO	A
	C741	QFN81HK-103	0.01MF	50V	MYLAR	C
	C742	QFN81HK-103	0.01MF	50V	MYLAR	C
	C743	QFN81HK-103	0.01MF	50V	MYLAR	C
	C744	QFN81HK-103	0.01MF	50V	MYLAR	C
	C745	QCS21HJ-103	0.01MF	50V	CERAMIC	C
	C746	QCS21HJ-103	0.01MF	50V	CERAMIC	C

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C747	QCS21HJ-103	0.01NF	50V	CERAMIC	C
	C748	QCS21HJ-103	0.01MF	50V	CERAMIC	C
	C769	QFN81HK-222	2200PF	50V	MYLAR	C
	C770	QFN81HK-222	2200PF	50V	MYLAR	C
	C801	EEW7102-109	10000MF	71V	ELECTRO	
	C802	EEW7102-109	10000MF	71V	ELECTRO	
	C805	QCE22HP-103	0.01MF	500V	CERAMIC	A
	C805	QCE22HP-103	0.01MF	500V	CERAMIC	B
	C805	QCE22HP-103	0.01MF	500V	CERAMIC	DBS
	C805	QCE22HP-103	0.01MF	500V	CERAMIC	E
	C805	QFH42EK-104	0.1MF	250V	M.MYLAR	C
	C806	QCE22HP-103	0.01MF	500V	CERAMIC	C
	C807	QCS21HJ-103	0.01MF	50V	CERAMIC	C
	C808	QCE22HP-103	0.01MF	500V	CERAMIC	C
	C821	QETB1EM-476	47MF	25V	ELECTRO	
	C822	QETB1EM-476	47MF	25V	ELECTRO	
	C823	QETB1HM-107	100MF	50V	ELECTRO	
	C824	QETB1HM-107	100MF	50V	ELECTRO	
	C901	QETB1AM-227	220MF	10V	ELECTRO	
	C902	QETB1CM-226	22MF	16V	ELECTRO	
	C903	QETB1HM-475	4.7MF	50V	ELECTRO	
	C904	QETB1HM-226	22MF	50V	ELECTRO	
	C905	QETB1HM-105	1MF	50V	ELECTRO	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R369	QRD14CJ-470S	47	1/4W	UNF.CARBON	A
⚠	R369	QRZ0077-470	47	1/4W	FUSIBLE	B
⚠	R369	QRZ0077-470	47	1/4W	FUSIBLE	C
⚠	R369	QRZ0077-470	47	1/4W	FUSIBLE	DBS
⚠	R369	QRZ0077-470	47	1/4W	FUSIBLE	E
	R551	QVDB98C-E15C	100K		VARIABLE	
	R553	QRD167J-183	18K	1/6W	CARBON	
	R554	QRD167J-183	18K	1/6W	CARBON	
	R555	QRD167J-332	3.3K	1/6W	CARBON	
	R556	QRD167J-332	3.3K	1/6W	CARBON	
	R561	QVDB98C-E15C	100K		VARIABLE	
	R563	QRD167J-472	4.7K	1/6W	CARBON	
	R564	QRD167J-472	4.7K	1/6W	CARBON	
	R565	QRD167J-821	820	1/6W	CARBON	
	R566	QRD167J-821	820	1/6W	CARBON	
	R701	QRD167J-101	100	1/6W	CARBON	
	R702	QRD167J-101	100	1/6W	CARBON	
	R703	QRD167J-913	91K	1/6W	CARBON	
	R704	QRD167J-913	91K	1/6W	CARBON	
	R707	QRD167J-101	100	1/6W	CARBON	
	R708	QRD167J-101	100	1/6W	CARBON	
	R709	QRD167J-272	2.7K	1/6W	CARBON	
	R710	QRD167J-272	2.7K	1/6W	CARBON	
⚠	R711	QRD14CJ-621S	620	1/4W	UNF.CARBON	
⚠	R712	QRD14CJ-621S	620	1/4W	UNF.CARBON	
	R719	QRD167J-133	13K	1/6W	CARBON	
	R720	QRD167J-133	13K	1/6W	CARBON	
	R721	QRD167J-823	82K	1/6W	CARBON	
	R722	QRD167J-823	82K	1/6W	CARBON	
⚠	R729	QRD125J-100	10	1/2W	UNF.CARBON	
⚠	R730	QRD125J-100	10	1/2W	UNF.CARBON	
⚠	R731	QRD125J-330	33	1/2W	UNF.CARBON	
⚠	R732	QRD125J-330	33	1/2W	UNF.CARBON	
	R741	SDT250	250	1/4W	THERMISTOR	
	R742	SDT250	250	1/4W	THERMISTOR	
	R751	QVPE601-501	500	0.15W	VARIABLE	
	R752	QVPE601-501	500	0.15W	VARIABLE	
	R753	QRD167J-471	470	1/6W	CARBON	
	R754	QRD167J-471	470	1/6W	CARBON	
	R755	QRD167J-391	390	1/6W	CARBON	
	R756	QRD167J-391	390	1/6W	CARBON	
	R757	QRD167J-101	100	1/6W	CARBON	
	R758	QRD167J-101	100	1/6W	CARBON	
	R759	ERT-D2WFL351S	350	1/4W	THERMISTOR	
	R760	ERT-D2WFL351S	350	1/4W	THERMISTOR	
⚠	R761	QRD14CJ-272S	2.7K	1/4W	UNF.CARBON	A
⚠	R761	QRZ0077-272	2.7K	1/4W	FUSIBLE	B
⚠	R761	QRZ0077-272	2.7K	1/4W	FUSIBLE	C
⚠	R761	QRZ0077-272	2.7K	1/4W	FUSIBLE	DBS
⚠	R761	QRZ0077-272	2.7K	1/4W	FUSIBLE	E
⚠	R762	QRD14CJ-272S	2.7K	1/4W	UNF.CARBON	A
⚠	R762	QRZ0077-272	2.7K	1/4W	FUSIBLE	B
⚠	R762	QRZ0077-272	2.7K	1/4W	FUSIBLE	C
⚠	R762	QRZ0077-272	2.7K	1/4W	FUSIBLE	DBS
⚠	R762	QRZ0077-272	2.7K	1/4W	FUSIBLE	E

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R763	QRD14CJ-471S	470	1/4W	UNF.CARBON	A
⚠	R763	QRZ0077-471	470	1/4W	FUSIBLE	B
⚠	R763	QRZ0077-471	470	1/4W	FUSIBLE	C
⚠	R763	QRZ0077-471	470	1/4W	FUSIBLE	DBS
⚠	R763	QRZ0077-471	470	1/4W	FUSIBLE	E
⚠	R764	QRD14CJ-471S	470	1/4W	UNF.CARBON	A
⚠	R764	QRZ0077-471	470	1/4W	FUSIBLE	B
⚠	R764	QRZ0077-471	470	1/4W	FUSIBLE	C
⚠	R764	QRZ0077-471	470	1/4W	FUSIBLE	DBS
⚠	R764	QRZ0077-471	470	1/4W	FUSIBLE	E
⚠	R765	ERF032K-R22	0.22	3W	CEMENT	
⚠	R766	ERF032K-R22	0.22	3W	CEMENT	
⚠	R767	QRD14CJ-560S	56	1/4W	UNF.CARBON	B
⚠	R767	QRD14CJ-560S	56	1/4W	UNF.CARBON	C
⚠	R767	QRD14CJ-560S	56	1/4W	UNF.CARBON	DBS
⚠	R767	QRD14CJ-560S	56	1/4W	UNF.CARBON	E
⚠	R767	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R768	QRD14CJ-560S	56	1/4W	UNF.CARBON	B
⚠	R768	QRD14CJ-560S	56	1/4W	UNF.CARBON	C
⚠	R768	QRD14CJ-560S	56	1/4W	UNF.CARBON	DBS
⚠	R768	QRD14CJ-560S	56	1/4W	UNF.CARBON	E
⚠	R768	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R769	QRG022J-331AM	330	2W	O.M.FILM	
⚠	R770	QRG022J-331AM	330	2W	O.M.FILM	
⚠	R771	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R771	QRZ0077-4R7	4.7	1/4W	FUSIBLE	B
⚠	R771	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
⚠	R771	QRZ0077-4R7	4.7	1/4W	FUSIBLE	DBS
⚠	R771	QRZ0077-4R7	4.7	1/4W	FUSIBLE	E
⚠	R772	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R772	QRZ0077-4R7	4.7	1/4W	FUSIBLE	B
⚠	R772	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
⚠	R772	QRZ0077-4R7	4.7	1/4W	FUSIBLE	DBS
⚠	R772	QRZ0077-4R7	4.7	1/4W	FUSIBLE	E
⚠	R773	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R773	QRZ0077-4R7	4.7	1/4W	FUSIBLE	B
⚠	R773	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
⚠	R773	QRZ0077-4R7	4.7	1/4W	FUSIBLE	DBS
⚠	R773	QRZ0077-4R7	4.7	1/4W	FUSIBLE	E
⚠	R774	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R774	QRZ0077-4R7	4.7	1/4W	FUSIBLE	B
⚠	R774	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
⚠	R774	QRZ0077-4R7	4.7	1/4W	FUSIBLE	DBS
⚠	R774	QRZ0077-4R7	4.7	1/4W	FUSIBLE	E
⚠	R775	QRD14CJ-330S	33	1/4W	UNF.CARBON	A
⚠	R775	QRZ0077-330	33	1/4W	FUSIBLE	B
⚠	R775	QRZ0077-330	33	1/4W	FUSIBLE	C
⚠	R775	QRZ0077-330	33	1/4W	FUSIBLE	DBS
⚠	R775	QRZ0077-330	33	1/4W	FUSIBLE	E
⚠	R776	QRD14CJ-330S	33	1/4W	UNF.CARBON	A
⚠	R776	QRZ0077-330	33	1/4W	FUSIBLE	B
⚠	R776	QRZ0077-330	33	1/4W	FUSIBLE	C
⚠	R776	QRZ0077-330	33	1/4W	FUSIBLE	DBS
⚠	R776	QRZ0077-330	33	1/4W	FUSIBLE	E
⚠	R777	QRD14CJ-330S	33	1/4W	UNF.CARBON	A
⚠	R777	QRZ0077-330	33	1/4W	FUSIBLE	B
⚠	R777	QRZ0077-330	33	1/4W	FUSIBLE	C
⚠	R777	QRZ0077-330	33	1/4W	FUSIBLE	DBS
⚠	R777	QRZ0077-330	33	1/4W	FUSIBLE	E
⚠	R778	QRD14CJ-330S	33	1/4W	UNF.CARBON	A
⚠	R778	QRZ0077-330	33	1/4W	FUSIBLE	B
⚠	R778	QRZ0077-330	33	1/4W	FUSIBLE	C
⚠	R778	QRZ0077-330	33	1/4W	FUSIBLE	DBS
⚠	R778	QRZ0077-330	33	1/4W	FUSIBLE	E
⚠	R779	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R779	QRZ0077-100	10	1/4W	FUSIBLE	B
⚠	R779	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R779	QRZ0077-100	10	1/4W	FUSIBLE	DBS
⚠	R779	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R780	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R780	QRZ0077-100	10	1/4W	FUSIBLE	B
⚠	R780	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R780	QRZ0077-100	10	1/4W	FUSIBLE	DBS
⚠	R780	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R781	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R781	QRZ0077-100	10	1/4W	FUSIBLE	B
⚠	R781	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R781	QRZ0077-100	10	1/4W	FUSIBLE	DBS
⚠	R781	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R782	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R782	QRZ0077-100	10	1/4W	FUSIBLE	B
⚠	R782	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R782	QRZ0077-100	10	1/4W	FUSIBLE	DBS
⚠	R782	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R783	QRZ0077-4R7	4.7	1/4W	FUSIBLE	B

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R783	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
⚠	R783	QRZ0077-4R7	4.7	1/4W	FUSIBLE	DBS
⚠	R783	QRZ0077-4R7	4.7	1/4W	FUSIBLE	E
⚠	R784	QRZ0077-4R7	4.7	1/4W	FUSIBLE	B
⚠	R784	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
⚠	R784	QRZ0077-4R7	4.7	1/4W	FUSIBLE	DBS
⚠	R784	QRZ0077-4R7	4.7	1/4W	FUSIBLE	E
⚠	R785	QRZ0077-4R7	4.7	1/4W	FUSIBLE	B
⚠	R785	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
⚠	R785	QRZ0077-4R7	4.7	1/4W	FUSIBLE	DBS
⚠	R785	QRZ0077-4R7	4.7	1/4W	FUSIBLE	E
⚠	R786	QRZ0077-4R7	4.7	1/4W	FUSIBLE	B
⚠	R786	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
⚠	R786	QRZ0077-4R7	4.7	1/4W	FUSIBLE	DBS
⚠	R786	QRZ0077-4R7	4.7	1/4W	FUSIBLE	E
	R787	QRD167J-271	270	1/6W	CARBON	
	R788	QRD167J-271	270	1/6W	CARBON	
	R789	QRD167J-271	270	1/6W	CARBON	
	R790	QRD167J-271	270	1/6W	CARBON	
	R791	QRD167J-820	82	1/6W	CARBON	
	R792	QRD167J-820	82	1/6W	CARBON	
	R793	QRD167J-820	82	1/6W	CARBON	
	R794	QRD167J-820	82	1/6W	CARBON	
⚠	R795	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R796	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R797	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R798	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R821	QRD14CJ-330S	33	1/4W	UNF.CARBON	A
⚠	R821	QRZ0077-330	33	1/4W	FUSIBLE	B
⚠	R821	QRZ0077-330	33	1/4W	FUSIBLE	C
⚠	R821	QRZ0077-330	33	1/4W	FUSIBLE	DBS
⚠	R821	QRZ0077-330	33	1/4W	FUSIBLE	E
⚠	R822	QRD14CJ-330S	33	1/4W	UNF.CARBON	A
⚠	R822	QRZ0077-330	33	1/4W	FUSIBLE	B
⚠	R822	QRZ0077-330	33	1/4W	FUSIBLE	C
⚠	R822	QRZ0077-330	33	1/4W	FUSIBLE	DBS
⚠	R822	QRZ0077-330	33	1/4W	FUSIBLE	E
⚠	R831	QRD14CJ-2R7S	2.7	1/4W	UNF.CARBON	
	R901	QRD167J-272	2.7K	1/6W	CARBON	
	R902	QRD167J-272	2.7K	1/6W	CARBON	
	R903	QRD167J-153	15K	1/6W	CARBON	
	R904	QRD167J-153	15K	1/6W	CARBON	
	R905	QRD167J-104	100K	1/6W	CARBON	
	R906	QRD167J-823	82K	1/6W	CARBON	
	R907	QRD167J-223	22K	1/6W	CARBON	
	R908	QRD167J-223	22K	1/6W	CARBON	
	R909	QRD167J-103	10K	1/6W	CARBON	
	R911	QRD167J-473	47K	1/6W	CARBON	
	R912	QRD167J-562	5.6K	1/6W	CARBON	
	R916	QRD167J-103	10K	1/6W	CARBON	
	R917	QRD167J-103	10K	1/6W	CARBON	
	R918	QRD167J-274	270K	1/6W	CARBON	
	R919	QRD167J-332	3.3K	1/6W	CARBON	
	R920	QRD167J-393	39K	1/6W	CARBON	
	R921	QRD167J-153	15K	1/6W	CARBON	
⚠	R922	QRD14CJ-182S	1.8K	1/4W	UNF.CARBON	
	R923	QRD167J-473	47K	1/6W	CARBON	
⚠	R924	QRD14CJ-152S	1.5K	1/4W	UNF.CARBON	
⚠	R925	QRD14CJ-221S	220	1/4W	UNF.CARBON	

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMG7331-002U	FUSE CLIP	A
		EMG7331-002	FUSE CLIP	A
		E11697-104	**CIRCUIT BOARD**	A
		E11697-104	**CIRCUIT BOARD**	B
		E11697-104	**CIRCUIT BOARD**	C
		E11697-104	**CIRCUIT BOARD**	E
		E11697-104BS	**CIRCUIT BOARD**	DBS
		E304905-001	BRACKET	
		E304906-003	BRACKET	
		E305277-002	HEAT SINK	
		E33754-001	TIE BAND	
		E65508-002	TAB	A
		E65508-002	TAB	E
		E67764-302	WRAPPING TERMINAL	A
		E67764-302	WRAPPING TERMINAL	E

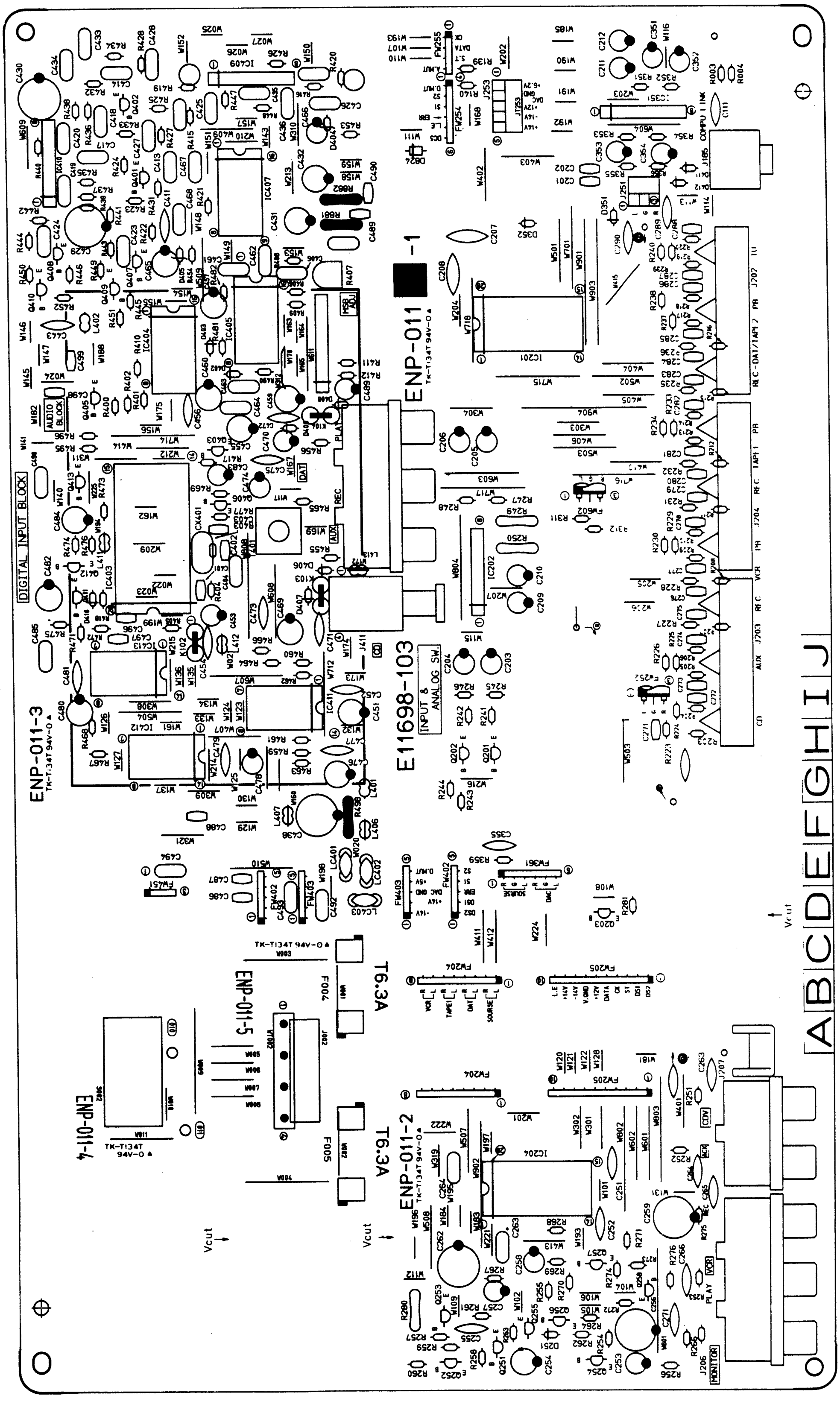
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E70945-H25	HEAT SINK	
		E73265-001	SCREW	
		E73265-001	SCREW	
		E73525-001	SCREW	
		E73525-001	SCREW	
		SBSE3008CC	SCREW	
⚠	J001	QMC0637-004	AC OUTLET	E
⚠	J001	QMC0638-001	AC OUTLET	A
	J702	QMS6302-133	HEADPHONE JACK	
	J751	EMB00TP-801C	SPEAKER TERMINAL	
	L701	EQL0001-1R0	INDUCTOR	
	L702	EQL0001-1R0	INDUCTOR	
⚠	S001	QSP1106-005	POWER SWITCH	A
⚠	S001	QSP1106-005	POWER SWITCH	E
	S751	QST4231-E04	PUSH SWITCH	
	FW253	EWR35B-40LST	FLAT WIRE	
	FW701	EWR23C-13LN	FLAT WIRE	
	FW702	EWR36B-10LST	FLAT WIRE	
	FW703	EWR36B-10LST	FLAT WIRE	
	FW704	EWR35B-35SST	FLAT WIRE	
	FW705	EWR33B-35SST	FLAT WIRE	
	FW706	EWR39B-20LST	FLAT WIRE	
	JT801	EMV7122-005	CONNECTOR	
	JT802	EMV7122-003	CONNECTOR	
	JT851	EMV7122-003	CONNECTOR	
	JT852	EMV7122-003	CONNECTOR	
	RY901	ESK5D24-218	RELAY	
	WT801	E67764-103	WRAPPING TERMINAL	
		EWT011-088	TERMINAL WIRE	
		EWT011-088	TERMINAL WIRE	
		EWT011-088	TERMINAL WIRE	

⚠ : SAFETY PARTS

■ ENP-011 □ D/A Source PC Board Ass'y

Note: ENP-011 □ Varies according to the areas employed. See note (1) when placing an order.


ENP-011-1
E11698-103
TK-T134T 94V-0
ENP-011-3
ENP-011-2
ENP-011-4
ENP-011-5
DIGITAL INPUT BLOCK
AUDIO BLOCK
INPUT & ANALOG SW.
T6.3A
T6.3A
F004
F005
Vcut
Vcut
Vcut
A
B
C
D
E
F
G
H
I
J
MONITOR
COMPU LINK
REC-DAT/TAPE 2 PB
AUX
CD
PLAY
REC
DAT

Note (1)

PC Board Ass'y	Designated Areas
ENP-011 A	The U.S.A., Canada
ENP-011 B	Continental Europe, Australia, U.K.
ENP-011 C	West Germany
ENP-011 D	U.S. Military Market & Other Countries

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q201	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q202	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q203	DTA114YS	SILICON	ROHM	
	Q251	2SC458(C)	SILICON	HITACHI	
	Q252	2SC458(C)	SILICON	HITACHI	
	Q253	2SC458(C)	SILICON	HITACHI	
	Q254	DTC114YS	SILICON	ROHM	
	Q255	2SC458(C)	SILICON	HITACHI	
	Q256	2SC458(C)	SILICON	HITACHI	
	Q257	2SC458(C)	SILICON	HITACHI	
	Q258	2SA933(R,S)	SILICON	ROHM	
	Q401	2SC3068	SILICON	SANYO	
	Q402	2SC3068	SILICON	SANYO	
	Q403	DTC114YS	SILICON	ROHM	
	Q405	2SA564A(Q,R)	SILICON	MATSUSHITA	
	Q406	DTC114YS	SILICON	ROHM	
	Q407	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q408	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q409	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q410	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q411	2SA564A(Q,R)	SILICON	MATSUSHITA	
	Q412	2SA564A(Q,R)	SILICON	MATSUSHITA	
	Q413	2SD1302(S,T)	SILICON	MATSUSHITA	

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC201	TC9164N	I.C.	TOSHIBA	
	IC202	M5218L	I.C.	MITSUBISHI	
	IC204	TC9163N	I.C.	TOSHIBA	
	IC351	M5218L	I.C.	MITSUBISHI	
	IC403	YM3623B	I.C.	YAMAHA	
	IC404	SM5807EP	I.C.	NPC	
	IC405	PCM56P	I.C.	BURR BROWN	
	IC407	UPD4053BC	I.C.	NEC	
	IC409	M5209L	I.C.	MITSUBISHI	
	IC410	M5218L	I.C.	MITSUBISHI	
	IC411	TC74HCU04P	I.C.	TOSHIBA	
	IC412	TC74HC00P	I.C.	TOSHIBA	
	IC413	TC74HC00P	I.C.	TOSHIBA	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D251	MTZ8.2JC	ZENER	ROHM	
	D351	1SS133	SILICON	ROHM	
	D352	1SS133	SILICON	ROHM	
	D402	1SS133	SILICON	ROHM	
	D403	1SS133	SILICON	ROHM	
	D404	MTZ5.6JC	ZENER	ROHM	
	D405	MTZ5.6JC	ZENER	ROHM	
	D406	1SS133	SILICON	ROHM	
	D407	1SS133	SILICON	ROHM	
	D408	1SS133	SILICON	ROHM	
	D409	1SS133	SILICON	ROHM	
	D410	1SS133	SILICON	ROHM	
	D411	1SS133	SILICON	ROHM	
	D412	1SS133	SILICON	ROHM	
	D824	ERA15-02L19	SILICON	FUJI DENKI	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C111	QCS21HJ-221	220PF	50V	CERAMIC	
	C201	QCBB1HK-561	560PF	50V	CERAMIC	
	C202	QCBB1HK-561	560PF	50V	CERAMIC	
	C203	QETB1EM-476	47MF	25V	ELECTRO	
	C204	QETB1EM-476	47MF	25V	ELECTRO	
	C205	QETB1EM-106	10MF	25V	ELECTRO	
	C206	QETB1EM-106	10MF	25V	ELECTRO	
	C207	QCF21HP-103	0.01MF	50V	CERAMIC	
	C208	QCF21HP-103	0.01MF	50V	CERAMIC	
	C209	QETB1CM-476	47MF	16V	ELECTRO	
	C210	QETB1CM-476	47MF	16V	ELECTRO	
	C251	QCS21HJ-561	560PF	50V	CERAMIC	
	C252	QCS21HJ-561	560PF	50V	CERAMIC	
	C253	QETB1AM-476	47MF	10V	ELECTRO	
	C254	QETB1CM-226	22MF	16V	ELECTRO	
	C255	QCS21HJ-100	10PF	50V	CERAMIC	
	C256	QETB1AM-108	1000MF	10V	ELECTRO	
	C257	QETB1AM-476	47MF	10V	ELECTRO	
	C258	QETB1AM-107	100MF	10V	ELECTRO	
	C259	QETB1AM-108	1000MF	10V	ELECTRO	
	C262	QETB1CM-108	1000MF	16V	ELECTRO	
	C263	QCS21HJ-101	100PF	50V	CERAMIC	
	C264	QCS21HJ-101	100PF	50V	CERAMIC	
	C265	QCS21HJ-101	100PF	50V	CERAMIC	
	C266	QCS21HJ-101	100PF	50V	CERAMIC	
	C271	QCBB1HK-221	220PF	50V	CERAMIC	C
	C271	QCC21EM-473	0.047MF	25V	CERAMIC	
	C272	QCBB1HK-221	220PF	50V	CERAMIC	C
	C273	QCBB1HK-221	220PF	50V	CERAMIC	C
	C274	QCBB1HK-221	220PF	50V	CERAMIC	C
	C275	QCBB1HK-221	220PF	50V	CERAMIC	C
	C276	QCBB1HK-221	220PF	50V	CERAMIC	C
	C277	QCBB1HK-221	220PF	50V	CERAMIC	C
	C278	QCBB1HK-221	220PF	50V	CERAMIC	C
	C279	QCBB1HK-221	220PF	50V	CERAMIC	C
	C280	QCBB1HK-221	220PF	50V	CERAMIC	C
	C281	QCBB1HK-221	220PF	50V	CERAMIC	C
	C282	QCBB1HK-221	220PF	50V	CERAMIC	C
	C283	QCBB1HK-221	220PF	50V	CERAMIC	C
	C284	QCBB1HK-221	220PF	50V	CERAMIC	C
	C285	QCBB1HK-221	220PF	50V	CERAMIC	C
	C286	QCBB1HK-221	220PF	50V	CERAMIC	C
	C287	QCBB1HK-221	220PF	50V	CERAMIC	C
	C288	QCBB1HK-221	220PF	50V	CERAMIC	C
	C289	QFV81HJ-103	0.01MF	50V	T.FILM	C
	C290	QFV81HJ-103	0.01MF	50V	T.FILM	C
	C351	QEK51EM-106	10MF	25V	ELECTRO	
	C352	QEK51EM-106	10MF	25V	ELECTRO	
	C353	QETB1EM-106	10MF	25V	ELECTRO	
	C354	QETB1EM-106	10MF	25V	ELECTRO	
	C402	QCSB1HJ-330	33PF	50V	CERAMIC	
	C403	QCSB1HJ-330	33PF	50V	CERAMIC	
	C404	QFN81HK-822	8200PF	50V	MYLAR	
	C406	QFN81HK-103	0.01MF	50V	MYLAR	
	C409	QFS31HJ-560	56PF	50V	POLYSTYROL	
	C410	QFS31HJ-560	56PF	50V	POLYSTYROL	
	C411	QCY21HK-102	1000PF	50V	CERAMIC	
	C413	QFN81HJ-473	0.047MF	50V	MYLAR	
	C414	QFN81HJ-473	0.047MF	50V	MYLAR	
	C417	QFN81HJ-562	5600PF	50V	MYLAR	
	C418	QFN81HJ-562	5600PF	50V	MYLAR	
	C419	QFP81HJ-271	270PF	50V	POLY	
	C420	QFP81HJ-271	270PF	50V	POLY	
	C423	QFV81HJ-333	0.033MF	50V	T.FILM	
	C424	QFV81HJ-333	0.033MF	50V	T.FILM	
	C425	QFP81HJ-271	270PF	50V	POLY	
	C426	QFP81HJ-271	270PF	50V	POLY	
	C427	QFN81HJ-102	1000PF	50V	MYLAR	
	C428	QFN81HJ-102	1000PF	50V	MYLAR	
	C429	EEZ5003-107	100MF		ELECTRO	
	C430	EEZ5003-107	100MF		ELECTRO	
	C431	QETB1CM-107	100MF	16V	ELECTRO	
	C432	QETB1CM-107	100MF	16V	ELECTRO	
	C433	QFV81HJ-223	0.022MF	50V	T.FILM	
	C434	QFV81HJ-223	0.022MF	50V	T.FILM	
	C435	QFV81HJ-223	0.022MF	50V	T.FILM	
	C436	QFV81HJ-223	0.022MF	50V	T.FILM	
	C438	QETB0JM-108	1000MF	6.3V	ELECTRO	
	C443	QCF21HP-103	0.01MF	50V	CERAMIC	
	C451	QETB1AM-107	100MF	10V	ELECTRO	
	C452	QCC21EM-473	0.047MF	25V	CERAMIC	
	C453	QETB1AM-107	100MF	10V	ELECTRO	
	C454	QCC21EM-473	0.047MF	25V	CERAMIC	
	C455	QETB1AM-107	100MF	10V	ELECTRO	
	C456	QCC21EM-473	0.047MF	25V	CERAMIC	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C457	QETB1CM-107	100MF	16V	ELECTRO	
	C459	QETB1CM-107	100MF	16V	ELECTRO	
	C460	QETB1CM-107	100MF	16V	ELECTRO	
	C461	QFN81HK-223	0.022MF	50V	MYLAR	
	C462	QFN81HK-223	0.022MF	50V	MYLAR	
	C463	QFN81HK-223	0.022MF	50V	MYLAR	
	C464	QFN81HK-223	0.022MF	50V	MYLAR	
	C465	QETB1AM-107	100MF	10V	ELECTRO	
	C466	QETB1AM-107	100MF	10V	ELECTRO	
	C467	QFN81HK-223	0.022MF	50V	MYLAR	
	C468	QFN81HK-223	0.022MF	50V	MYLAR	
	C469	QETB1HM-476	47MF	50V	ELECTRO	
	C470	QETB1HM-476	47MF	50V	ELECTRO	
	C471	QCC21EM-103	0.01MF	25V	CERAMIC	
	C472	QCC21EM-103	0.01MF	25V	CERAMIC	
	C473	QCS21HJ-330	33PF	50V	CERAMIC	
	C474	QETB1EM-476	47MF	25V	ELECTRO	
	C475	QCC21EM-103	0.01MF	25V	CERAMIC	
	C476	QETB1AM-107	100MF	10V	ELECTRO	
	C477	QCC21EM-473	0.047MF	25V	CERAMIC	
	C478	QETB1AM-107	100MF	10V	ELECTRO	
	C479	QCC21EM-473	0.047MF	25V	CERAMIC	
	C480	QETB1AM-107	100MF	10V	ELECTRO	
	C481	QCC21EM-473	0.047MF	25V	CERAMIC	
	C482	QETB1HM-475	4.7MF	50V	ELECTRO	
	C483	QETB1HM-474	0.47MF	50V	ELECTRO	
	C484	QETB1HM-475	4.7MF	50V	ELECTRO	
	C485	QFN81HJ-393	0.039MF	50V	MYLAR	
	C486	QCGB1HK-102	1000PF	50V	CERAMIC	
	C487	QCGB1HK-102	1000PF	50V	CERAMIC	
	C488	QCGB1HK-102	1000PF	50V	CERAMIC	
	C489	QETB1CM-107	100MF	16V	ELECTRO	
	C490	QFN81HJ-103	0.01MF	50V	MYLAR	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R003	QRD167J-100	10	1/6W	CARBON	
	R004	QRD167J-221	220	1/6W	CARBON	
	R139	QRD167J-472	4.7K	1/6W	CARBON	
	R140	QRD167J-223	22K	1/6W	CARBON	
	R203	QRD167J-221	220	1/6W	CARBON	
	R204	QRD167J-221	220	1/6W	CARBON	
	R205	QRD167J-221	220	1/6W	CARBON	
	R206	QRD167J-221	220	1/6W	CARBON	
	R207	QRD167J-221	220	1/6W	CARBON	
	R208	QRD167J-221	220	1/6W	CARBON	
	R209	QRD167J-221	220	1/6W	CARBON	
	R210	QRD167J-221	220	1/6W	CARBON	
	R211	QRD167J-221	220	1/6W	CARBON	
	R212	QRD167J-221	220	1/6W	CARBON	
	R213	QRD167J-221	220	1/6W	CARBON	
	R214	QRD167J-221	220	1/6W	CARBON	
	R215	QRD167J-221	220	1/6W	CARBON	
	R216	QRD167J-221	220	1/6W	CARBON	
	R217	QRD167J-221	220	1/6W	CARBON	
	R218	QRD167J-221	220	1/6W	CARBON	
	R219	QRD167J-221	220	1/6W	CARBON	
	R220	QRD167J-221	220	1/6W	CARBON	
	R223	QRD167J-473	47K	1/6W	CARBON	
	R224	QRD167J-473	47K	1/6W	CARBON	
	R225	QRD167J-473	47K	1/6W	CARBON	
	R226	QRD167J-473	47K	1/6W	CARBON	
	R227	QRD167J-474	470K	1/6W	CARBON	
	R228	QRD167J-474	470K	1/6W	CARBON	
	R229	QRD167J-473	47K	1/6W	CARBON	
	R230	QRD167J-473	47K	1/6W	CARBON	
	R231	QRD167J-474	470K	1/6W	CARBON	
	R232	QRD167J-474	470K	1/6W	CARBON	
	R233	QRD167J-473	47K	1/6W	CARBON	
	R234	QRD167J-473	47K	1/6W	CARBON	
	R235	QRD167J-474	470K	1/6W	CARBON	
	R236	QRD167J-474	470K	1/6W	CARBON	
	R237	QRD167J-474	470K	1/6W	CARBON	
	R238	QRD167J-474	470K	1/6W	CARBON	
	R239	QRD167J-473	47K	1/6W	CARBON	
	R240	QRD167J-473	47K	1/6W	CARBON	
	R241	QRD167J-221	220	1/6W	CARBON	
	R242	QRD167J-221	220	1/6W	CARBON	
	R243	QRD167J-103	10K	1/6W	CARBON	
	R244	QRD167J-103	10K	1/6W	CARBON	
	R245	QRD167J-104	100K	1/6W	CARBON	
	R246	QRD167J-104	100K	1/6W	CARBON	
	R247	QRD167J-474	470K	1/6W	CARBON	
	R248	QRD167J-474	470K	1/6W	CARBON	
	R249	QRD167J-471	470	1/6W	CARBON	
	R250	QRD167J-471	470	1/6W	CARBON	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R251	QRD167J-750	75	1/6W	CARBON	
	R252	QRD167J-750	75	1/6W	CARBON	
	R253	QRD167J-750	75	1/6W	CARBON	
	R254	QRD167J-153	15K	1/6W	CARBON	
	R255	QRD167J-333	33K	1/6W	CARBON	
	R257	QRD167J-392	3.9K	1/6W	CARBON	
	R258	QRD167J-201	200	1/6W	CARBON	
	R259	QRD167J-362	3.6K	1/6W	CARBON	
	R260	QRD167J-302	3K	1/6W	CARBON	
	R261	QRD167J-101	100	1/6W	CARBON	
	R262	QRD167J-102	1K	1/6W	CARBON	
	R263	QRD167J-560	56	1/6W	CARBON	
	R264	QRD167J-560	56	1/6W	CARBON	
	R266	QRD167J-750	75	1/6W	CARBON	
	R267	QRD167J-474	470K	1/6W	CARBON	
	R268	QRD167J-104	100K	1/6W	CARBON	
	R269	QRD167J-681	680	1/6W	CARBON	
	R270	QRD167J-392	3.9K	1/6W	CARBON	
	R271	QRD167J-622	6.2K	1/6W	CARBON	
	R272	QRD167J-121	120	1/6W	CARBON	
	R273	QRD167J-910	91	1/6W	CARBON	
	R274	QRD167J-271	270	1/6W	CARBON	
	R276	QRD167J-750	75	1/6W	CARBON	
⚠	R280	QRD14CJ-330S	33	1/4W	UNF.CARBON	A
⚠	R280	QRZ0077-330	33	1/4W	FUSIBLE	B
⚠	R280	QRZ0077-330	33	1/4W	FUSIBLE	C
⚠	R280	QRZ0077-330	33	1/4W	FUSIBLE	D
	R281	QRD167J-105	1M	1/6W	CARBON	
	R351	QRD167J-473	47K	1/6W	CARBON	
	R352	QRD167J-473	47K	1/6W	CARBON	
	R355	QRD167J-104	100K	1/6W	CARBON	
	R356	QRD167J-104	100K	1/6W	CARBON	
	R400	QRD167J-101	100	1/6W	CARBON	
	R401	QRD167J-101	100	1/6W	CARBON	
	R402	QRD167J-101	100	1/6W	CARBON	
	R403	QRD167J-105	1M	1/6W	CARBON	
	R404	QRD167J-101	100	1/6W	CARBON	
	R405	QRD167J-152	1.5K	1/6W	CARBON	
	R406	QRD167J-474	470K	1/6W	CARBON	
	R407	QVZ3518-104	100K	0.1W	VARIABLE	
	R408	QRD167J-224	220K	1/6W	CARBON	
	R409	QRD167J-155	1.5M	1/6W	CARBON	
	R410	QRD167J-471	470	1/6W	CARBON	
	R411	QRD167J-562	5.6K	1/6W	CARBON	
	R412	QRD167J-562	5.6K	1/6W	CARBON	
	R415	QRD167J-562	5.6K	1/6W	CARBON	
	R416	QRD167J-562	5.6K	1/6W	CARBON	
	R417	QRD167J-822	8.2K	1/6W	CARBON	
	R418	QRD167J-105	1M	1/6W	CARBON	
	R419	QRD167J-105	1M	1/6W	CARBON	
	R420	QRD167J-105	1M	1/6W	CARBON	
	R421	QRD167J-104	100K	1/6W	CARBON	
	R422	QRD167J-124	120K	1/6W	CARBON	
	R423	QRD167J-682	6.8K	1/6W	CARBON	
	R424	QRD167J-682	6.8K	1/6W	CARBON	
	R425	QRD167J-102	1K	1/6W	CARBON	
	R426	QRD167J-102	1K	1/6W	CARBON	
	R427	QRD167J-331	330	1/6W	CARBON	
	R428	QRD167J-331	330	1/6W	CARBON	
	R431	QRD167J-105	1M	1/6W	CARBON	
	R432	QRD167J-105	1M	1/6W	CARBON	
	R433	QRD167J-302	3K	1/6W	CARBON	
	R434	QRD167J-302	3K	1/6W	CARBON	
	R435	QRD167J-622	6.2K	1/6W	CARBON	
	R436	QRD167J-622	6.2K	1/6W	CARBON	
	R437	QRD167J-392	3.9K	1/6W	CARBON	
	R438	QRD167J-392	3.9K	1/6W	CARBON	
	R441	QRD167J-104	100K	1/6W	CARBON	
	R442	QRD167J-104	100K	1/6W	CARBON	
	R443	QRD167J-271	270	1/6W	CARBON	
	R444	QRD167J-271	270	1/6W	CARBON	
	R445	QRD167J-103	10K	1/6W	CARBON	
	R446	QRD167J-103	10K	1/6W	CARBON	
	R447	QRD167J-102	1K	1/6W	CARBON	
	R448	QRD167J-102	1K	1/6W	CARBON	
	R449	QRD167J-271	270	1/6W	CARBON	
	R450	QRD167J-271	270	1/6W	CARBON	
	R451	QRD167J-103	10K	1/6W	CARBON	
	R452	QRD167J-103	10K	1/6W	CARBON	
	R453	QRD167J-102	1K	1/6W	CARBON	
	R454	QRD167J-102	1K	1/6W	CARBON	
	R455	QRD167J-750	75	1/6W	CARBON	
	R456	QRD167J-750	75	1/6W	CARBON	
	R459	QRD167J-103	10K	1/6W	CARBON	
	R460	QRD167J-103	10K	1/6W	CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R461	QRD167J-273	27K	1/6W	CARBON	
	R462	QRD167J-273	27K	1/6W	CARBON	
	R463	QRD167J-222	2.2K	1/6W	CARBON	
	R464	QRD167J-222	2.2K	1/6W	CARBON	
	R465	QRD167J-750	75	1/6W	CARBON	
	R466	QRD167J-100	10	1/6W	CARBON	
	R467	QRD167J-103	10K	1/6W	CARBON	
	R468	QRD167J-103	10K	1/6W	CARBON	
	R469	QRD167J-224	220K	1/6W	CARBON	
	R471	QRD167J-103	10K	1/6W	CARBON	
	R472	QRD167J-103	10K	1/6W	CARBON	
	R473	QRD167J-472	4.7K	1/6W	CARBON	
	R474	QRD167J-471	470	1/6W	CARBON	
	R475	QRD167J-103	10K	1/6W	CARBON	
	R476	QRD167J-472	4.7K	1/6W	CARBON	
	R477	QRD167J-224	220K	1/6W	CARBON	
	R481	QRD167J-470	47	1/6W	CARBON	
	R482	QRD167J-470	47	1/6W	CARBON	
	R490	QRD167J-564	560K	1/6W	CARBON	
	R495	QRD167J-223	22K	1/6W	CARBON	
	R496	QRD167J-153	15K	1/6W	CARBON	
⚠	R498	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R498	QRZ0077-100	10	1/4W	FUSIBLE	B
⚠	R498	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R498	QRZ0077-100	10	1/4W	FUSIBLE	D
⚠	R881	QRD14CJ-221S	220	1/4W	UNF.CARBON	
⚠	R882	QRD14CJ-151S	150	1/4W	UNF.CARBON	

⚠ : SAFETY PARTS

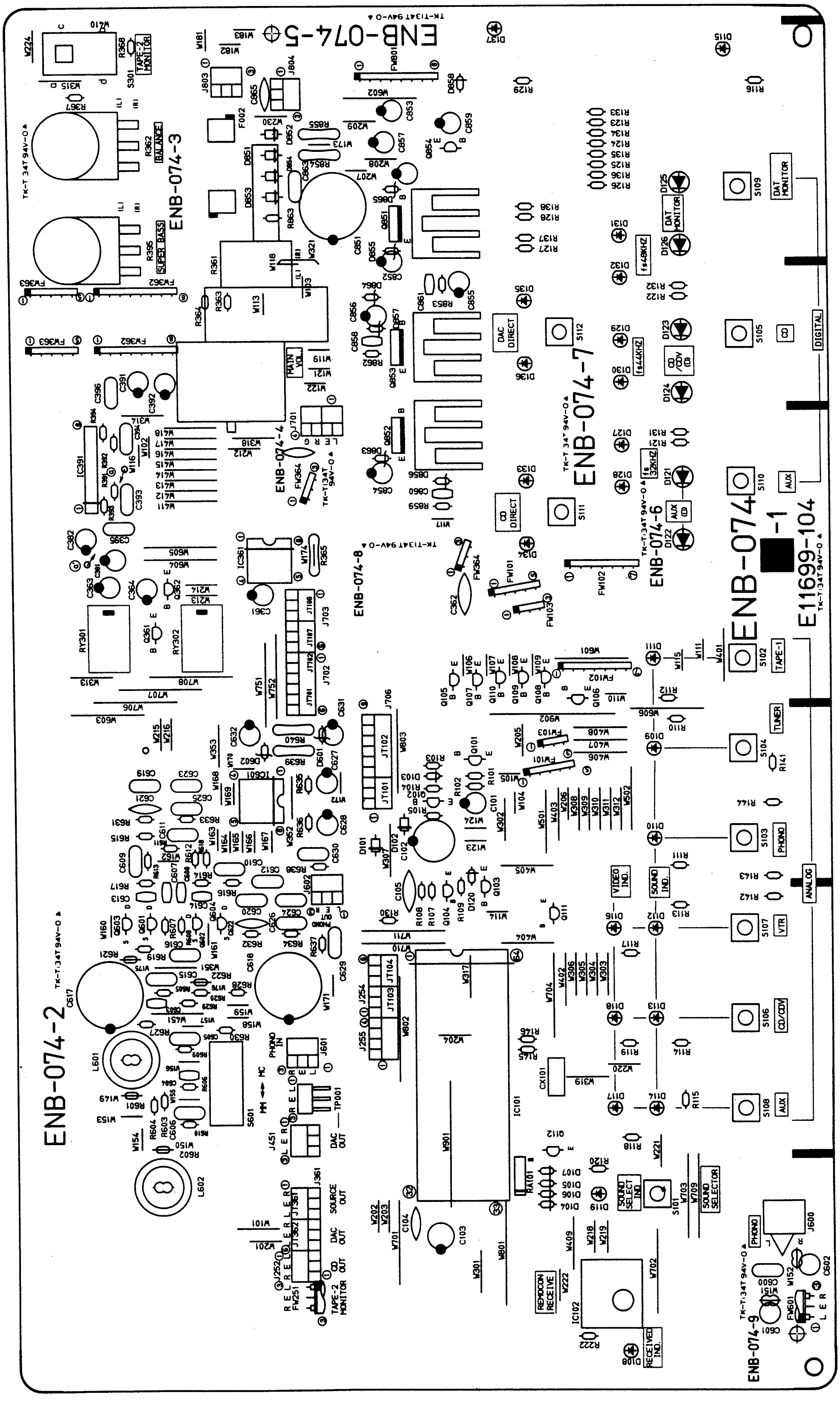
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMG7331-002U	FUSE CLIP	A
		EMG7331-002U	FUSE CLIP	B
		EMG7331-002U	FUSE CLIP	C
		EMG7331-002	FUSE CLIP	A
		EMG7331-002	FUSE CLIP	B
		EMG7331-002	FUSE CLIP	C
		E11698-103	CIRCUIT BOARD	
		E33754-001	TIE BAND	
		QHW4110-001	WIRE CLAMP	
	J185	QMS3533-001	MINI JACK	
	J202	EMN00TV-603A	6P PIN JACK	
	J203	EMN00TV-603A	6P PIN JACK	
	J204	EMN00TV-603A	6P PIN JACK	
	J206	EMN00YV-304A	3P PIN JACK	
	J207	EMN00YV-205A	2P PIN JACK	
	J251	EMV7122-003Z	CONNECTOR	
	J253	EMV7122-005Z	CONNECTOR	
	J401	EMN00YV-307A	3P PIN JACK	
	J411	TORX172	JACK	
	K102	ENZ8101-007	INDUCTOR	
	K103	ENZ8101-007	INDUCTOR	
	K104	ENZ8101-007	INDUCTOR	
	L401	EQL4004-470	INDUCTOR	
	L402	EQL4004-1R0	INDUCTOR	
	L406	EQL4004-4R7	INDUCTOR	
	L411	EQL4004-1R0	INDUCTOR	
	L412	EQL4004-1R0	INDUCTOR	
	L413	EQL4004-4R7	INDUCTOR	
	S002	QSS5C22-E02	SLIDE SWITCH	A
	S002	QSS5C22-E03	SLIDE SWITCH	B
	S002	QSS5C22-E03	SLIDE SWITCH	C
	T401	ENZ3003-001	COIL	
	CX401	ECX0018-000KS	RESONATOR	
	FW204	EWR38B-10SST	FLAT WIRE	
	FW205	EWR3AB-10SST	FLAT WIRE	
	FW252	EWR23C-35LN	FLAT WIRE	
	FW254	EWR36B-40LST	FLAT WIRE	
	FW255	EWR34B-40LST	FLAT WIRE	
	FW361	EWR36B-13LST	FLAT WIRE	
	FW402	EWR35B-20SST	FLAT WIRE	
	FW403	EWR35B-16SST	FLAT WIRE	
	FW451	EWR33B-16LST	FLAT WIRE	
	FW602	EWR23C-25LN	FLAT WIRE	
	WT002	E67764-104	WRAPPING TERMINAL	A
	WT002	E67764-104	WRAPPING TERMINAL	B
	WT002	E67764-104	WRAPPING TERMINAL	C
	LC401	EQF0601-222	FILTER	
	LC402	EQF0601-222	FILTER	
	LC403	EQF0601-222	FILTER	

⚠ : SAFETY PARTS

■ ENB-074 □ Front PC Board Ass'y

Note: ENB-074 □ Varies according to the area employed. See note (1) when placing an order.


ENB-074-1
E11699-104
ENB-074-2
ENB-074-3
ENB-074-4
ENB-074-5
ENB-074-6
ENB-074-7
ENB-074-8
ENB-074-9
TAPE-2 MONITOR
BALANCE
SUPER BASS
MAIN VOL
DAC DIRECT
CD DIRECT
DAT MONITOR
DIGITAL
AUX
TAPE-1
TUNER
PHONO
VTR
CD/CDV
ANALOG
VIDEO IND.
SOUND IND.
SOUND SELECT IND.
SOUND SELECTOR
REMOCON RECEIVE
RECEIVED IND.
PHONO IN
DAC OUT
SOURCE OUT
CD OUT
TAPE-2 MONITOR

Note (1)

PC Board Ass'y	Designated Areas
ENB-074 A	The U.S.A., Canada
ENB-074 B	U.S. Military Market, Australia, Countinental Europe, U.K., Other Countries
ENB-074 C	West Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q101	DTC144ES	SILICON	ROHM	
	Q102	DTC144ES	SILICON	ROHM	
	Q103	DTA114YS	SILICON	ROHM	
	Q104	2SC1685(R,S)	SILICON	MATSUSHITA	
	Q105	DTC114YS	SILICON	ROHM	
	Q106	DTC114YS	SILICON	ROHM	
	Q107	DTC114YS	SILICON	ROHM	
	Q108	DTC114YS	SILICON	ROHM	
	Q109	DTC114YS	SILICON	ROHM	
	Q110	DTC114YS	SILICON	ROHM	
	Q111	DTC114YS	SILICON	ROHM	
	Q112	DTC114YS	SILICON	ROHM	
	Q361	DTC114YS	SILICON	ROHM	
	Q362	DTC114YS	SILICON	ROHM	
	Q601	2SK170(BL)	F.E.T	TOSHIBA	
	Q602	2SK170(BL)	F.E.T	TOSHIBA	
	Q603	2SK170(BL)	F.E.T	TOSHIBA	
	Q604	2SK170(BL)	F.E.T	TOSHIBA	
	Q851	2SD1944(J,K)	SILICON	ROHM	
	Q852	2SD1944(J,K)	SILICON	ROHM	
	Q853	2SD1944(J,K)	SILICON	ROHM	
	Q854	DTC144ES	SILICON	ROHM	

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC101	UPD75104CW-115	I.C.	NEC	
	IC102	GP1U501V	I.C.	SHARP	
	IC361	LB1639	I.C.	SANYO	
	IC391	M5218L	I.C.	MITSUBISHI	
	IC601	NJM4560DD	I.C.	JRC	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D101	ERA15-02L19	SILICON	FUJI DENKI	
	D102	ERA15-02L19	SILICON	FUJI DENKI	
	D103	1SS133	SILICON	ROHM	
	D104	1SS133	SILICON	ROHM	
	D105	1SS133	SILICON	ROHM	
	D106	1SS133	SILICON	ROHM	
	D107	1SS133	SILICON	ROHM	
	D108	SLR-34VC3F	L.E.D.	ROHM	
	D109	SLR-34DC3F	L.E.D.	ROHM	
	D110	SLR-34DC3F	L.E.D.	ROHM	
	D111	SLR-34DC3F	L.E.D.	ROHM	
	D112	SLR-34DC3F	L.E.D.	ROHM	
	D113	SLR-34DC3F	L.E.D.	ROHM	
	D114	SLR-34DC3F	L.E.D.	ROHM	
	D115	SLR-34VC3F	L.E.D.	ROHM	
	D116	SLR-34YC3F	L.E.D.	ROHM	
	D117	SLR-34YC3F	L.E.D.	ROHM	
	D118	SLR-34YC3F	L.E.D.	ROHM	
	D119	SLR-34MC3F	L.E.D.	ROHM	
	D120	1SS133	SILICON	ROHM	
	D121	SLV-31YC50F124	L.E.D.	ROHM	
	D122	SLV-31YC50F124	L.E.D.	ROHM	
	D123	SLV-31YC50F124	L.E.D.	ROHM	
	D124	SLV-31YC50F124	L.E.D.	ROHM	
	D125	SLV-31YC50F124	L.E.D.	ROHM	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	D126	SLV-31YC50F124	L.E.D.	ROHM	
	D127	SLV-31YC3F	L.E.D.	ROHM	
	D128	SLV-31YC3F	L.E.D.	ROHM	
	D129	SLV-31YC3F	L.E.D.	ROHM	
	D130	SLV-31YC3F	L.E.D.	ROHM	
	D131	SLV-31YC3F	L.E.D.	ROHM	
	D132	SLV-31YC3F	L.E.D.	ROHM	
	D133	SLV-31YC3F	L.E.D.	ROHM	
	D134	SLV-31YC3F	L.E.D.	ROHM	
	D135	SLV-31YC3F	L.E.D.	ROHM	
	D136	SLV-31YC3F	L.E.D.	ROHM	
	D137	SLR-34DC3F	L.E.D.	ROHM	
	D601	MTZ13JC	ZENER	ROHM	
	D602	MTZ13JC	ZENER	ROHM	
	D851	ERA15-02L19	SILICON	FUJI DENKI	
	D852	ERA15-02L19	SILICON	FUJI DENKI	
	D853	ERA15-02L19	SILICON	FUJI DENKI	
	D854	ERA15-02L19	SILICON	FUJI DENKI	
	D855	MTZ12JC	ZENER	ROHM	
	D856	MTZ7.5JA	ZENER	ROHM	
	D857	MTZ5.6JC	ZENER	ROHM	
	D858	1SS133	SILICON	ROHM	
	D863	MTZ8.2JC	ZENER	ROHM	
	D864	MTZ6.8JC	ZENER	ROHM	
	D865	MTZ13JC	ZENER	ROHM	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C101	QETB1HM-475	4.7MF	50V	ELECTRO	
	C102	QETB0JM-108	1000MF	6.3V	ELECTRO	
	C103	QETB1AM-107	100MF	10V	ELECTRO	
	C104	QCC21EM-223	0.022MF	25V	CERAMIC	
	C105	QCF21HP-223	0.022MF	50V	CERAMIC	
	C361	QETB1AM-107	100MF	10V	ELECTRO	
	C362	QCF21HP-103	0.01MF	50V	CERAMIC	
	C363	QETB1HM-105	1MF	50V	ELECTRO	
	C364	QETB1HM-105	1MF	50V	ELECTRO	
	C381	QETB1CM-476	47MF	16V	ELECTRO	
	C391	QETB1CM-476	47MF	16V	ELECTRO	
	C392	QETB1CM-476	47MF	16V	ELECTRO	
	C393	QFN81HK-104	0.1MF	50V	MYLAR	
	C394	QFN81HK-104	0.1MF	50V	MYLAR	
	C395	QFV81HJ-334	0.33MF	50V	T.FILM	
	C396	QFV81HJ-334	0.33MF	50V	T.FILM	
	C600	QFV81HJ-103	0.01MF	50V	T.FILM	A
	C600	QFV81HJ-103	0.01MF	50V	T.FILM	B
	C600	QFV81HJ-473	0.047MF	50V	T.FILM	C
	C601	QFS31HJ-221	220PF	50V	POLYSTYROL	C
	C602	QFS31HJ-221	220PF	50V	POLYSTYROL	C
	C603	QCBB1HK-151	150PF	50V	CERAMIC	
	C604	QCBB1HK-151	150PF	50V	CERAMIC	
	C605	QFN81HK-103	0.01MF	50V	MYLAR	
	C606	QFN81HK-103	0.01MF	50V	MYLAR	
	C607	QCSB1HJ-470	47PF	50V	CERAMIC	
	C608	QCSB1HJ-470	47PF	50V	CERAMIC	
	C609	QFN81HK-392	3900PF	50V	MYLAR	
	C610	QFN81HK-392	3900PF	50V	MYLAR	
	C611	QFN81HK-822	8200PF	50V	MYLAR	
	C612	QFN81HK-822	8200PF	50V	MYLAR	
	C613	QCBB1HK-101	100PF	50V	CERAMIC	
	C614	QCBB1HK-101	100PF	50V	CERAMIC	
	C615	QFN81HK-473	0.047MF	50V	MYLAR	
	C616	QFN81HK-473	0.047MF	50V	MYLAR	
	C617	QEU50JM-228M	2200MF	6.3V	ELECTRO	
	C618	QEU50JM-228M	2200MF	6.3V	ELECTRO	
	C619	QFN81HJ-472	4700PF	50V	MYLAR	
	C620	QFN81HJ-472	4700PF	50V	MYLAR	
	C621	QCS21HJ-331	330PF	50V	CERAMIC	
	C622	QCS21HJ-331	330PF	50V	CERAMIC	
	C623	QFN81HJ-153	0.015MF	50V	MYLAR	
	C624	QFN81HJ-153	0.015MF	50V	MYLAR	
	C625	QFN81HJ-272	2700PF	50V	MYLAR	
	C626	QFN81HJ-272	2700PF	50V	MYLAR	
	C627	EEZ1005-105	1MF	100V	ELECTRO	
	C628	EEZ1005-105	1MF	100V	ELECTRO	
	C629	QFN81HJ-222	2200PF	50V	MYLAR	C
	C630	QFN81HJ-222	2200PF	50V	MYLAR	C
	C631	QETB1EM-107	100MF	25V	ELECTRO	
	C632	QETB1EM-107	100MF	25V	ELECTRO	
	C851	QETB1EM-228	2200MF	25V	ELECTRO	
	C852	QETB1CM-226	22MF	16V	ELECTRO	
	C853	QETB1CM-107	100MF	16V	ELECTRO	
	C854	QETB1CM-476	47MF	16V	ELECTRO	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C855	QETB1AM-107	100MF	10V	ELECTRO	
	C856	QETB1CM-226	22MF	16V	ELECTRO	
	C857	QETB1AM-107	100MF	10V	ELECTRO	
	C858	QCGB1HK-102	1000PF	50V	CERAMIC	
	C859	QETB1HM-105	1MF	50V	ELECTRO	
	C860	QCGB1HK-102	1000PF	50V	CERAMIC	
	C861	QCGB1HK-102	1000PF	50V	CERAMIC	
	C863	QFV81HJ-224	0.22MF	50V	T.FILM	
	C865	QCS21HJ-103	0.01MF	50V	CERAMIC	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R101	QRD167J-103	10K	1/6W	CARBON	
	R102	QRD167J-103	10K	1/6W	CARBON	
	R103	QRD167J-473	47K	1/6W	CARBON	
	R104	QRD167J-103	10K	1/6W	CARBON	
	R105	QRD167J-101	100	1/6W	CARBON	
	R107	QRD167J-473	47K	1/6W	CARBON	
	R108	QRD167J-333	33K	1/6W	CARBON	
	R109	QRD167J-103	10K	1/6W	CARBON	
	R110	QRD167J-391	390	1/6W	CARBON	
	R111	QRD167J-391	390	1/6W	CARBON	
	R112	QRD167J-391	390	1/6W	CARBON	
	R113	QRD167J-391	390	1/6W	CARBON	
	R114	QRD167J-391	390	1/6W	CARBON	
	R115	QRD167J-391	390	1/6W	CARBON	
	R116	QRD167J-511	510	1/6W	CARBON	
	R117	QRD167J-271	270	1/6W	CARBON	
	R118	QRD167J-271	270	1/6W	CARBON	
	R119	QRD167J-271	270	1/6W	CARBON	
	R120	QRD167J-271	270	1/6W	CARBON	
	R121	QRD167J-681	680	1/6W	CARBON	
	R122	QRD167J-681	680	1/6W	CARBON	
	R123	QRD167J-681	680	1/6W	CARBON	
	R124	QRD167J-681	680	1/6W	CARBON	
	R125	QRD167J-681	680	1/6W	CARBON	
	R126	QRD167J-681	680	1/6W	CARBON	
	R127	QRD167J-102	1K	1/6W	CARBON	
	R128	QRD167J-102	1K	1/6W	CARBON	
	R129	QRD167J-391	390	1/6W	CARBON	
	R130	QRD167J-103	10K	1/6W	CARBON	
	R131	QRD167J-681	680	1/6W	CARBON	
	R132	QRD167J-681	680	1/6W	CARBON	
	R133	QRD167J-681	680	1/6W	CARBON	
	R134	QRD167J-681	680	1/6W	CARBON	
	R135	QRD167J-681	680	1/6W	CARBON	
	R136	QRD167J-681	680	1/6W	CARBON	
	R137	QRD167J-102	1K	1/6W	CARBON	
	R138	QRD167J-102	1K	1/6W	CARBON	
	R141	QRD167J-474	470K	1/6W	CARBON	
	R142	QRD167J-474	470K	1/6W	CARBON	
	R143	QRD167J-474	470K	1/6W	CARBON	
	R144	QRD167J-474	470K	1/6W	CARBON	
	R145	QRD167J-104	100K	1/6W	CARBON	
	R146	QRD167J-104	100K	1/6W	CARBON	
	R222	QRD167J-271	270	1/6W	CARBON	
	R361	QVDB91B-E15D	100K		VARIABLE	
	R362	QVDB87M-EF5C	250K		VARIABLE	
	R363	QRD167J-153	15K	1/6W	CARBON	
	R364	QRD167J-153	15K	1/6W	CARBON	
	R367	QRD167J-222	2.2K	1/6W	CARBON	
	R368	QRD167J-222	2.2K	1/6W	CARBON	
	R391	QRD167J-474	470K	1/6W	CARBON	
	R392	QRD167J-474	470K	1/6W	CARBON	
	R393	QRD167J-331	330	1/6W	CARBON	
	R394	QRD167J-331	330	1/6W	CARBON	
	R395	QVDB87A-EF5B	250K		VARIABLE	
	R601	QRD167J-102	1K	1/6W	CARBON	C
	R602	QRD167J-102	1K	1/6W	CARBON	C
	R603	QRD167J-473	47K	1/6W	CARBON	
	R604	QRD167J-473	47K	1/6W	CARBON	
	R605	QRD167J-471	470	1/6W	CARBON	
	R606	QRD167J-471	470	1/6W	CARBON	
	R607	QRD167J-5R6	5.6	1/6W	CARBON	
	R608	QRD167J-5R6	5.6	1/6W	CARBON	
	R609	QRD167J-101	100	1/6W	CARBON	
	R610	QRD167J-101	100	1/6W	CARBON	
	R611	QRD167J-222	2.2K	1/6W	CARBON	
	R612	QRD167J-222	2.2K	1/6W	CARBON	
	R613	QRD167J-270	27	1/6W	CARBON	
	R614	QRD167J-270	27	1/6W	CARBON	
	R615	QRD167J-561	560	1/6W	CARBON	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R616	QRD167J-561	560	1/6W	CARBON	
	R617	QRD167J-222	2.2K	1/6W	CARBON	
	R618	QRD167J-222	2.2K	1/6W	CARBON	
	R619	QRD167J-222	2.2K	1/6W	CARBON	
	R620	QRD167J-222	2.2K	1/6W	CARBON	
	R627	QRD167J-180	18	1/6W	CARBON	
	R628	QRD167J-180	18	1/6W	CARBON	
	R629	QRD167J-221	220	1/6W	CARBON	
	R630	QRD167J-221	220	1/6W	CARBON	
	R631	QRD167J-153	15K	1/6W	CARBON	
	R632	QRD167J-153	15K	1/6W	CARBON	
	R633	QRD167J-184	180K	1/6W	CARBON	
	R634	QRD167J-184	180K	1/6W	CARBON	
	R635	QRD167J-331	330	1/6W	CARBON	
	R636	QRD167J-331	330	1/6W	CARBON	
	R637	QRD167J-104	100K	1/6W	CARBON	
	R638	QRD167J-104	100K	1/6W	CARBON	
⚠	R639	QRD14CJ-560S	56	1/4W	UNF.CARBON	A
⚠	R639	QRZ0077-560	56	1/4W	FUSIBLE	B
⚠	R639	QRZ0077-560	56	1/4W	FUSIBLE	C
⚠	R640	QRD14CJ-560S	56	1/4W	UNF.CARBON	A
⚠	R640	QRZ0077-560	56	1/4W	FUSIBLE	B
⚠	R640	QRZ0077-560	56	1/4W	FUSIBLE	C
	R853	QRD167J-152	1.5K	1/6W	CARBON	
	R859	QRD167J-332	3.3K	1/6W	CARBON	
	R862	QRD167J-332	3.3K	1/6W	CARBON	
	R863	QRD167J-102	1K	1/6W	CARBON	
	RA101	QRB049J-223	22K	1/10W	R.NETWORK	

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMG7331-002U	FUSE CLIP	
		EMG7331-002	FUSE CLIP	
		ENZ2006-001	SHIELD CASE	
		E03532-001	SHIELD CASE	C
		E11699-104	CIRCUIT BOARD	
		E70945-H25	HEAT SINK	
		E70945-H25	HEAT SINK	
		E70945-H25	HEAT SINK	
		SBSB3008CC	SCREW	
		SBSB3008CC	SCREW	
		SBSB3008CC	SCREW	
	J252	EMV7122-003	CONNECTOR	
	J255	EMV7122-004	CONNECTOR	
	J451	EMV7122-003	CONNECTOR	
	J600	EMN00TV-213A	2P PIN JACK	
	J601	EMV7122-003	CONNECTOR	
	J602	EMV7122-003	CONNECTOR	
	J701	EMV7122-004	CONNECTOR	
	J803	EMV7122-003	CONNECTOR	
	J804	EMV7122-003	CONNECTOR	
	L601	EQL4004-100	INDUCTOR	C
	L602	EQL4004-100	INDUCTOR	C
	S101	ESP0001-018	TACT SWITCH	
	S102	ESP0001-018	TACT SWITCH	
	S103	ESP0001-018	TACT SWITCH	
	S104	ESP0001-018	TACT SWITCH	
	S105	ESP0001-018	TACT SWITCH	
	S106	ESP0001-018	TACT SWITCH	
	S107	ESP0001-018	TACT SWITCH	
	S108	ESP0001-018	TACT SWITCH	
	S109	ESP0001-018	TACT SWITCH	
	S110	ESP0001-018	TACT SWITCH	
	S111	ESP0001-018	TACT SWITCH	
	S112	ESP0001-018	TACT SWITCH	
	S301	QSTL101-E02	PUSH SWITCH	
	S601	QST9101-E04	PUSH SWITCH	
	CX101	ECX0004-194KM	RESONATOR	
	FW101	EWR35B-13SST	FLAT WIRE	
	FW102	EWR37B-08SST	FLAT WIRE	
	FW103	EWR33B-10SST	FLAT WIRE	
	FW251	EWR23C-30LN	FLAT WIRE	
	FW362	EWR38B-08SST	FLAT WIRE	
	FW363	EWR35B-08SST	FLAT WIRE	
	FW364	EWR33B-08SST	FLAT WIRE	
	FW601	EWR23C-20LN	FLAT WIRE	
	FW801	EWR38B-10LST	FLAT WIRE	
	JT101	EMV7122-004	CONNECTOR	
	JT102	EMV7122-005	CONNECTOR	
	JT103	EMV7122-003	CONNECTOR	
	JT104	EMV7122-003	CONNECTOR	

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	JT106	EMV7122-003	CONNECTOR	
	JT107	EMV7122-003	CONNECTOR	
	JT361	EMV7122-003	CONNECTOR	
	JT362	EMV7122-003	CONNECTOR	
	JT701	EMV7122-003	CONNECTOR	
	JT702	EMV7122-003	CONNECTOR	
	RY301	ESK5D12-214	RELAY	
	RY302	ESK5D12-214	RELAY	
	TP001	QMV5004-003K	PLUG ASSY	

Accessories List

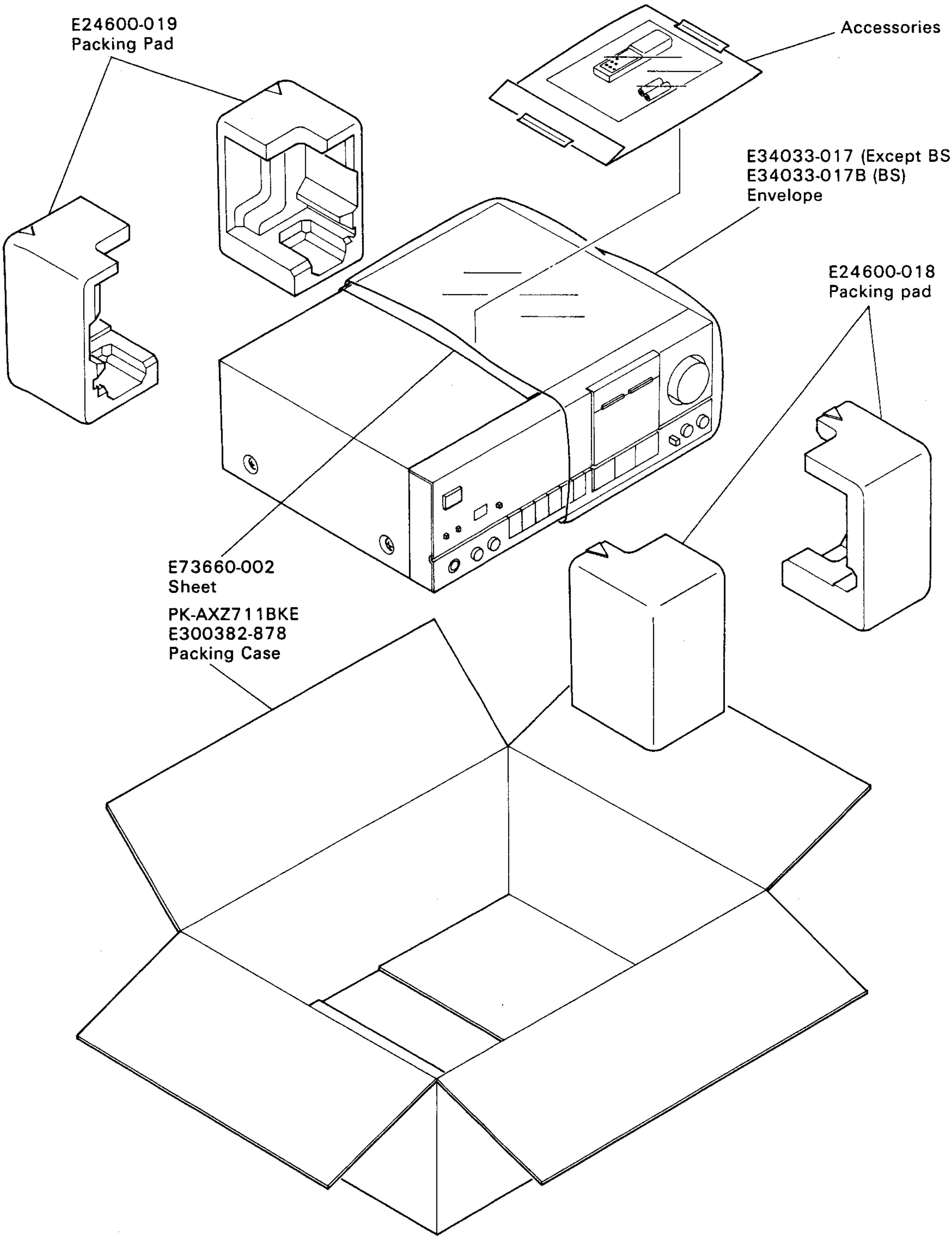
⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
		E30580-1478A	Instruction Book	1		Except BS
		E30580-1478ABS	Instruction Book	1		BS
		BT20025K	Warranty Card	1		C
		BT20029C	Warranty Card	1	for Australia	A
		BT20048B	Warranty Card	1		J, P, PG
		BT20060	Warranty Card	1		BS
		BT20064A	Warranty Card	1		G
		BT20098	Warranty Card	1	for New Zealand	A
		BT20044E	Safety Instruction Sheet	1		J
		BT20046C	Service Information	1		J, P, PG
		BT20066	EEC Agency	1		BS, G
		BT20071A	Service Center List	1		C
		QZL1008-001	FTZ Information Sheet	1		G
		E72360-001	Coution Sheet	1		C
⚠		QMF51A2-3R15S	Fuse	1		P
⚠		QMF51A2-6R3S	Fuse	1		U, PG
		E67142-T3R15	Fuse Label	1		P
		E67142-T6R3	Fuse Label	1		U, PG
		UM-4NJ-2PSA	Battery	1		
		TOCP172-1MB-JV	OPT Fiber	1		
		RM-SA711	Remote Controler	1		
		E04056	Siemens Plug	1		U, PG
		E43486-332A	Sheet	1		Except BS
		E43486-332ABS	Sheet	1		BS
		E4102-2	Envelope	1		Except BS
		E4102-2B	Envelope	1		BS
		E6581-4	Envelope	1	for Fuse	U, P, PG
		E66416-003	Envelope	1		J

⚠ : Safety Parts

The Marks for Designated Areas

J························The U.S.A
C························Canada
P, PG···············U.S.Military Market
E, EF···············Continental Europe
A························Australia
G························West Germany
BS······················U.K.
U························Other Countries
No mark indicates all areas.

Packing Materials and Parts List


E24600-019
Packing Pad
Accessories
E34033-017 (Except BS)
E34033-017B (BS)
Envelope
E24600-018
Packing pad
E73660-002
Sheet
PK-AXZ711BKE
E300382-878
Packing Case

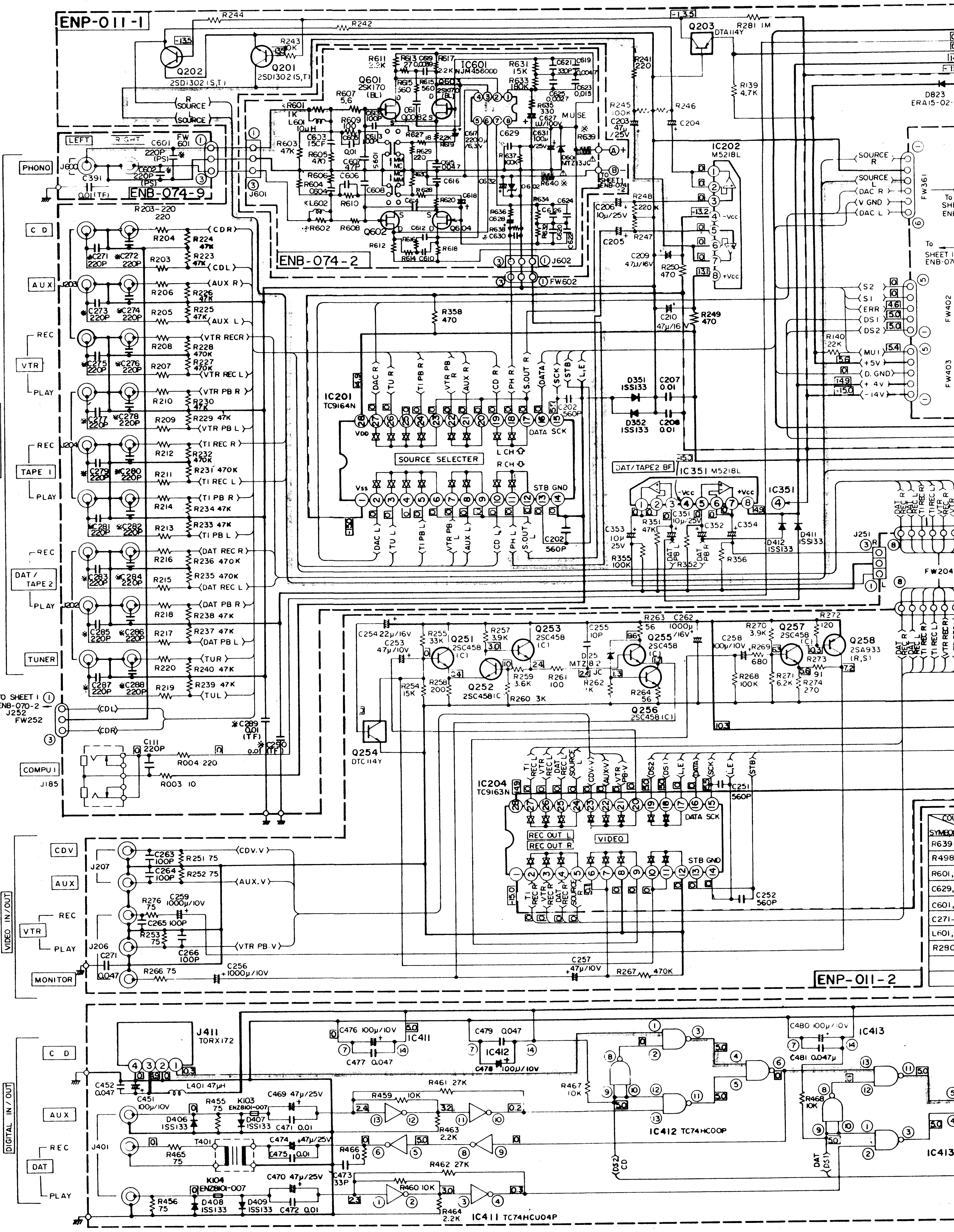
The Marks for Designated Areas

J……………………The U.S.A
C……………………Canada
P, PG……………U.S.Military Market
E, EF……………Continental Europe
A……………………Australia

G……………………West Germany
BS…………………U.K.
U……………………Other Countries
No mark indicates all areas.

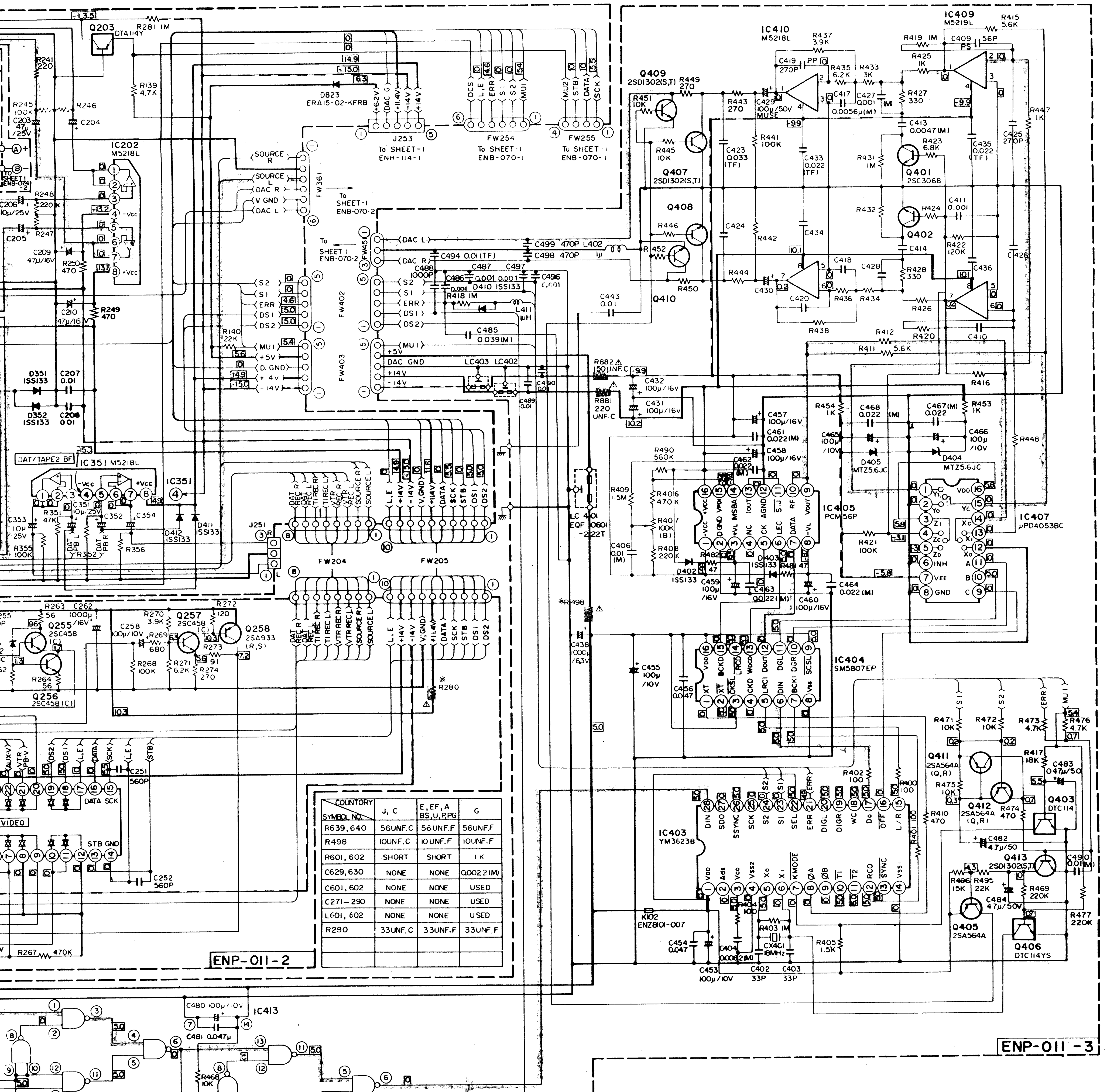
1) Schematic Diagram

■ DAC and Analog Source Section


ENP-011-1
ENB-074-9
ENB-074-2
ENP-011-2
PHONO
C D
AUX
REC
VTR
PLAY
TAPE I
DAT / TAPE 2
TUNER
COMPU I
CDV
MONITOR
ANALOG IN/OUT
VIDEO IN/OUT
DIGITAL IN/OUT
Q202 2SD1302(S,T)
Q201 2SD1302(S,T)
Q203 DTA114Y
Q601 2SK170 (BL)
Q602
Q603
Q604
IC601 NJM4560DD
IC202 M5218L
IC201 TC9164N
SOURCE SELECTER
IC351 M5218L
DAT/TAPE2 BF
IC204 TC9163N
REC OUT L
REC OUT R
VIDEO
Q251 2SC458
Q252 2SC458
Q253 2SC458
Q254 DTC114Y
Q255 2SC458
Q256 2SC458
Q257 2SC458
Q258 2SA933
J411 TORX172
IC411 TC74HCU04P
IC412 TC74HC00P
IC413
K103 ENZ8101-007
K104 ENZ8101-007
T401
D823 ERA15-02
FW361
FW402
FW403
FW204
FW252
J252
J251
J601
J602
FW602
J185
J207
J206
J401
TO SHEET I ENB-070-2

Notes:

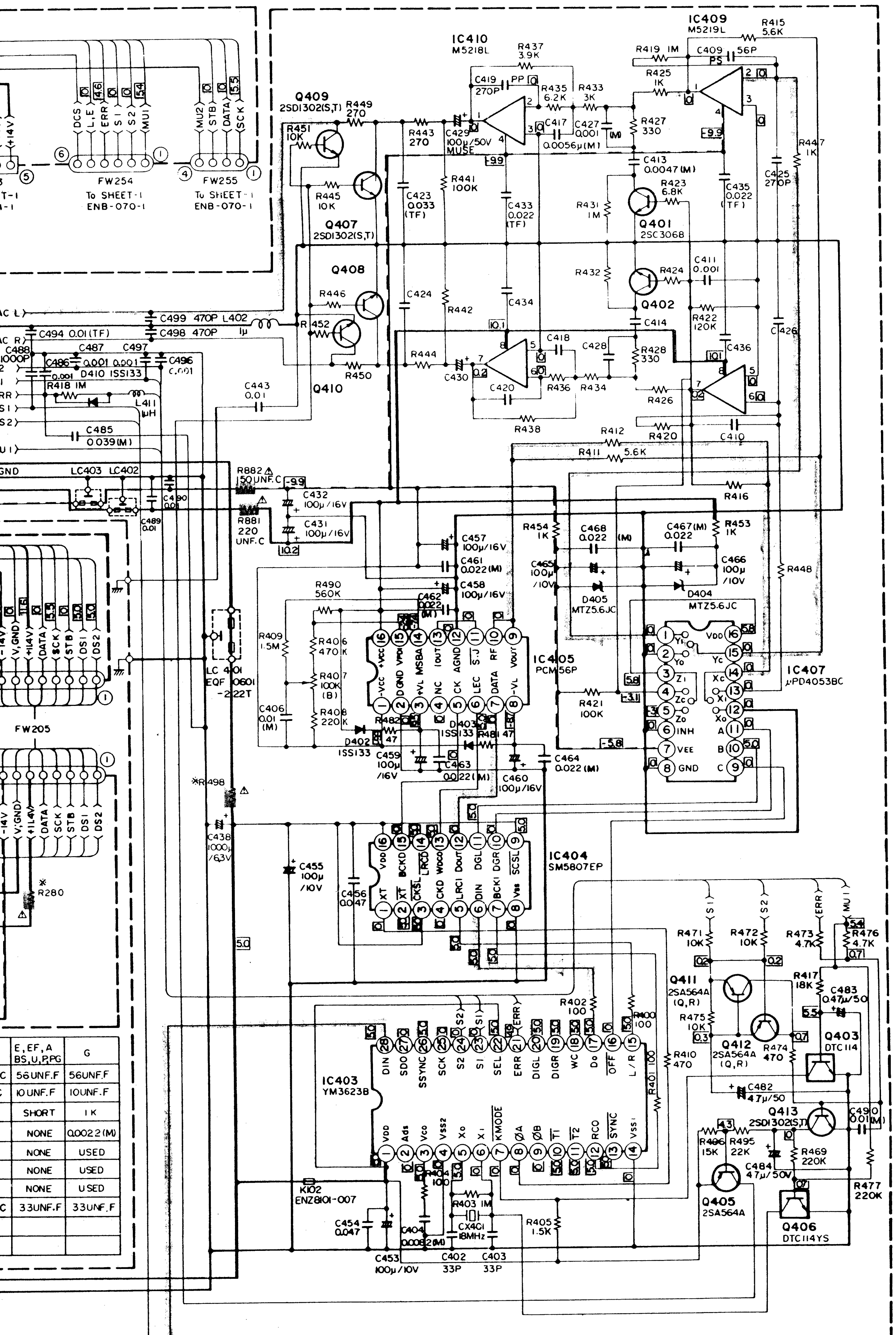
1. ▢ shows DC voltage to the chassis with no signal input.
2. —— indicates positive B power supply.
3. ---- indicates negative B power supply.
4. ▨ indicates signal path.
5. When replacing the parts in the darkened area (▨) and those marked with ⚠, be sure to use the designated parts to ensure safety.
6. This is the standard circuit diagram. The design and contents are subject to change without notice.


Q203 DTA114Y
R281 1M
R139 4.7K
IC202 M5218L
D823 ERA15-02-KFRB
J253 To SHEET-1 ENH-114-1
FW254 To SHEET-1 ENB-070-1
FW255 To SHEET-1 ENB-070-1
FW361
To SHEET-1 ENB-070-2
FW451
FW402
FW403
SOURCE R
SOURCE L
DAC R
V GND
DAC L
IC351 M5218L
DAT/TAPE2 BF
D351 1SS133
D352 1SS133
D411 1SS133
D412 1SS133
J251
FW204
FW205
Q255 2SC458
Q256 2SC458(C)
Q257 2SC458 (C)
Q258 2SA933 (R,S)
R280
IC409 M5219L
IC410 M5218L
Q409 2SD1302(S,T)
Q407 2SD1302(S,T)
Q408
Q410
Q401 2SC3068
Q402
L402
D410 1SS133
LC403 LC402
R882 150UNF.C
R881 220 UNF.C
LC401 EQF 0601 -222T
R498
IC405 PCM56P
D405 MTZ5.6JC
D404 MTZ5.6JC
IC407 μPD4053BC
D402 1SS133
D403 1SS133
IC404 SM5807EP
IC403 YM3623B
K102 ENZ8101-007
CX401 18MHz
Q411 2SA564A (Q,R)
Q412 2SA564A (Q,R)
Q403 DTC114
Q413 2SD1302(S,T)
Q405 2SA564A
Q406 DTC114YS
IC412 TC74HC00P
IC413 TC74HC00P
ENP-011-2
ENP-011-3

COUNTORY / SYMBOL NO.	J, C	E, EF, A BS, U, P, PG	G
R639, 640	56UNF.C	56UNF.F	56UNF.F
R498	10UNF.C	10UNF.F	10UNF.F
R601, 602	SHORT	SHORT	1K
C629, 630	NONE	NONE	0.0022(M)
C601, 602	NONE	NONE	USED
C271–290	NONE	NONE	USED
L601, 602	NONE	NONE	USED
R280	33UNF.C	33UNF.F	33UNF.F

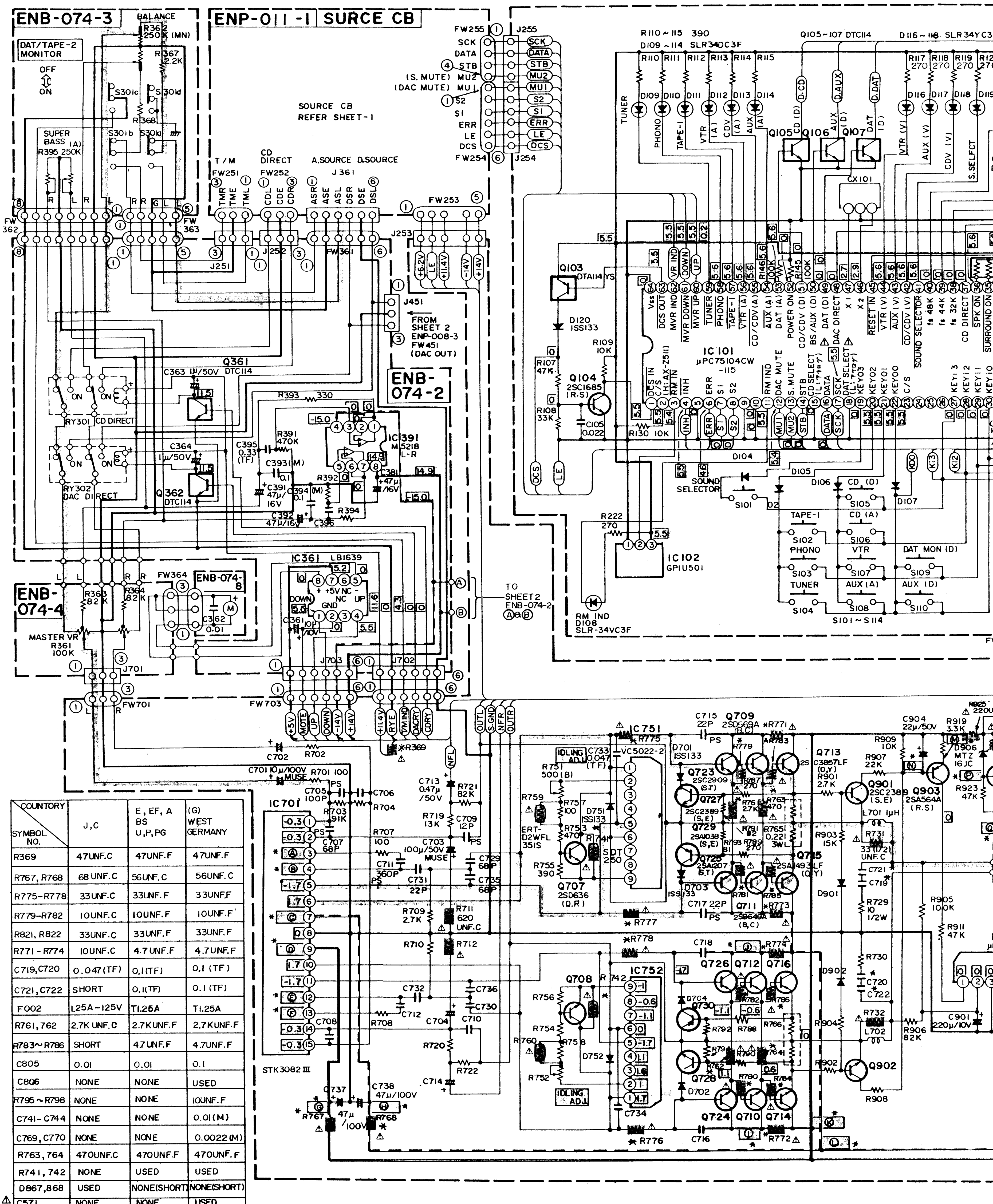
cing the parts in the darkened area (▨) and
ed with ⚠, be sure to use the designated parts to
ty.
standard circuit diagram.
and contents are subject to change without notice.

(No


IC410
M5218L
IC409
M5219L
Q409
2SD1302(S,T)
Q407
2SD1302(S,T)
Q408
Q410
Q401
2SC3068
Q402
FW254
To SHEET-1
ENB-070-1
FW255
To SHEET-1
ENB-070-1
FW205
IC405
PCM56P
IC407
μPD4053BC
IC404
SM5807EP
IC403
YM3623B
Q411
2SA564A
(Q,R)
Q412
2SA564A
(Q,R)
Q403
DTC114
Q413
2SD1302(S,T)
Q405
2SA564A
Q406
DTC114YS
D405
MTZ5.6JC
D404
MTZ5.6JC
D402
1SS133
D403
1SS133
D410 1SS133
LC401
EQF 0601
-222T
LC403 LC402
K102
ENZ8101-007
CX401
18MHz
R882
150UNF.C
R881
220
UNF.C
E,EF,A
BS,U,P,PG
G
56UNF.F
56UNF.F
10UNF.F
10UNF.F
SHORT
1K
NONE
0.0022(M)
NONE
USED
NONE
USED
NONE
USED
33UNF.F
33UNF.F
ENP-011-3

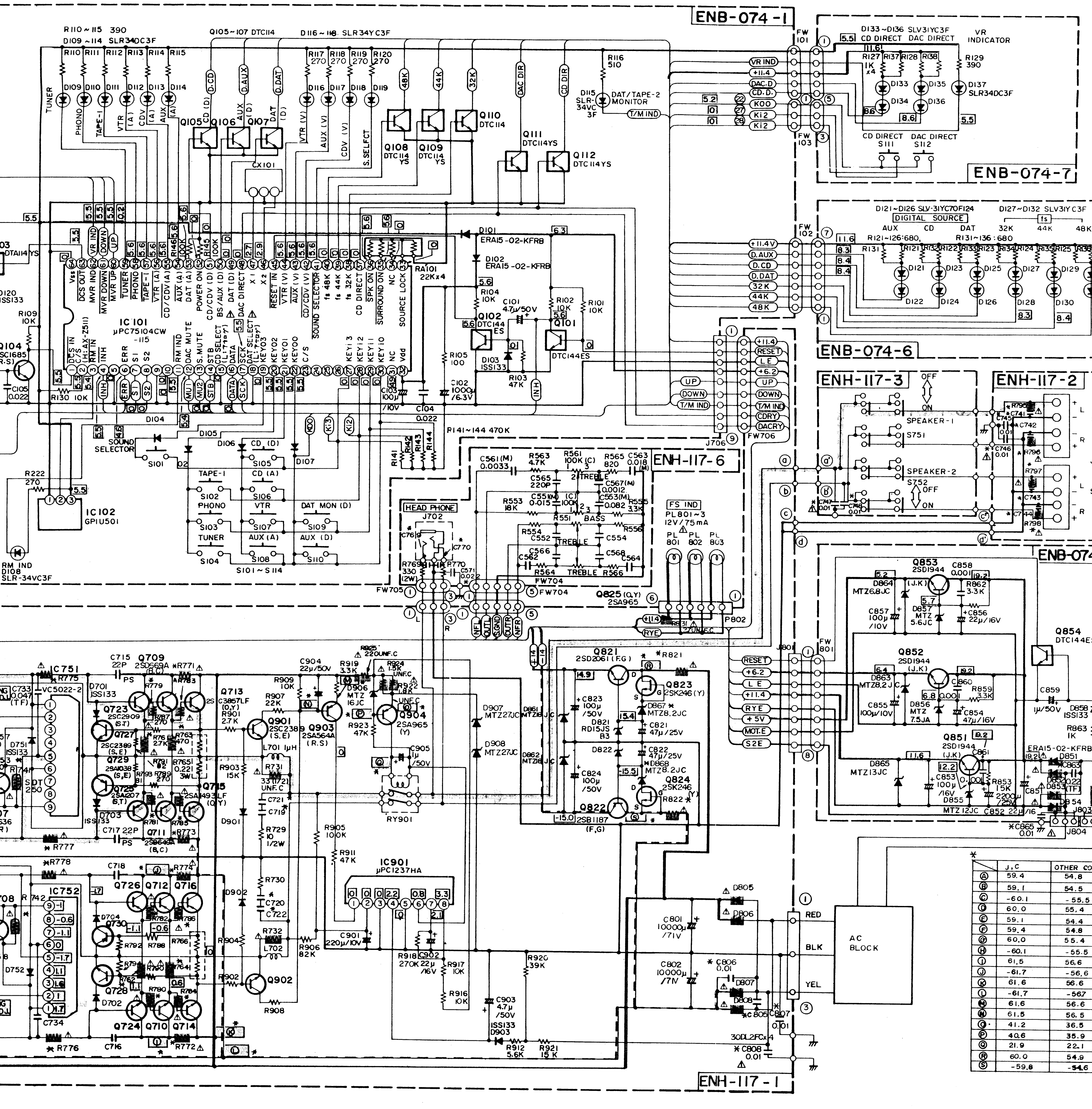
Schematic Diagram

■ Front Control and Power Amplifier Section


ENB-074-3
BALANCE
DAT/TAPE-2 MONITOR
OFF
ON
SUPER BASS (A)
R395 250K
ENP-011-1 SURCE CB
SOURCE CB REFER SHEET-1
T/M
CD DIRECT
A.SOURCE
D.SOURCE
FW251
FW252
J361
FW253
FW255
FW254
J255
J254
SCK
DATA
STB
(S.MUTE) MU2
(DAC MUTE) MU1
S2
S1
ERR
LE
DCS
FW362
FW363
J251
J252
FW361
J253
J451
FROM SHEET 2 ENP-008-3 FW451 (DAC OUT)
ENB-074-2
Q361 DTC114
Q362 DTC114
RY301 CD DIRECT
RY302 DAC DIRECT
IC391 M5218 L-R
IC361 LB1639
ENB-074-4
ENB-074-8
FW364
MASTER VR R361 100K
J701
FW701
FW703
J703
J702
TO SHEET2 ENB-074-2 Ⓐ&Ⓑ
IC701
STK3082 III
IC751
VC5022-2
IC752
IDLING ADJ
Q707 2SD636 (Q.R)
Q708
Q709 2SD569A
Q713 2SC3857LF (O,Y)
Q723 2SC2909 (S.T)
Q729 2SA1038 (S.E)
Q725 2SA1207 (S.T)
Q715 2SA1493LF (O,Y)
Q711 2SB643A (B,C)
Q726
Q712
Q716
Q728
Q724
Q710
Q714
Q901 2SC2389 (S.E)
Q902
Q903 2SA564A (R.S)
D906 MTZ 16JC
L701 1μH
L702
Q103 DTA114YS
Q104 2SC1685 (R.S)
D120 1SS133
IC101 μPC75104CW -115
IC102 GP1U501
Q105~107 DTC114
Q105
Q106
Q107
CX101
R110~115 390
D109~114 SLR34OC3F
D116~118 SLR34YC3
RM IND D108 SLR-34VC3F
SOUND SELECTOR
S101
TAPE-1 S102
PHONO S103
TUNER S104
CD (D) S105
CD (A) S106
VTR S107
AUX (A) S108
DAT MON (D) S109
AUX (D) S110
S101~S114

COUNTORY / SYMBOL NO.	J,C	E, EF, A BS U,P,PG	(G) WEST GERMANY
R369	47UNF.C	47UNF.F	47UNF.F
R767, R768	68 UNF.C	56UNF.C	56UNF.C
R775-R778	33UNF.C	33UNF.F	33UNF.F
R779-R782	10UNF.C	10UNF.F	10UNF.F
R821, R822	33UNF.C	33UNF.F	33UNF.F
R771-R774	10UNF.C	4.7 UNF.F	4.7 UNF.F
C719, C720	0.047(TF)	0.1(TF)	0.1 (TF)
C721, C722	SHORT	0.1(TF)	0.1 (TF)
F002	1.25A-125V	T1.25A	T1.25A
R761, 762	2.7K UNF.C	2.7K UNF.F	2.7K UNF.F
R783~R786	SHORT	4.7 UNF.F	4.7UNF.F
C805	0.01	0.01	0.1
C806	NONE	NONE	USED
R795~R798	NONE	NONE	10UNF.F
C741-C744	NONE	NONE	0.01(M)
C769, C770	NONE	NONE	0.0022(M)
R763, 764	470UNF.C	470UNF.F	470UNF.F
R741, 742	NONE	USED	USED
D867, 868	USED	NONE(SHORT)	NONE(SHORT)
⚠ C571	NONE	NONE	USED
C745-C748	NONE	NONE	USED
C807, C808	NONE	NONE	USED
C865	NONE	NONE	USED

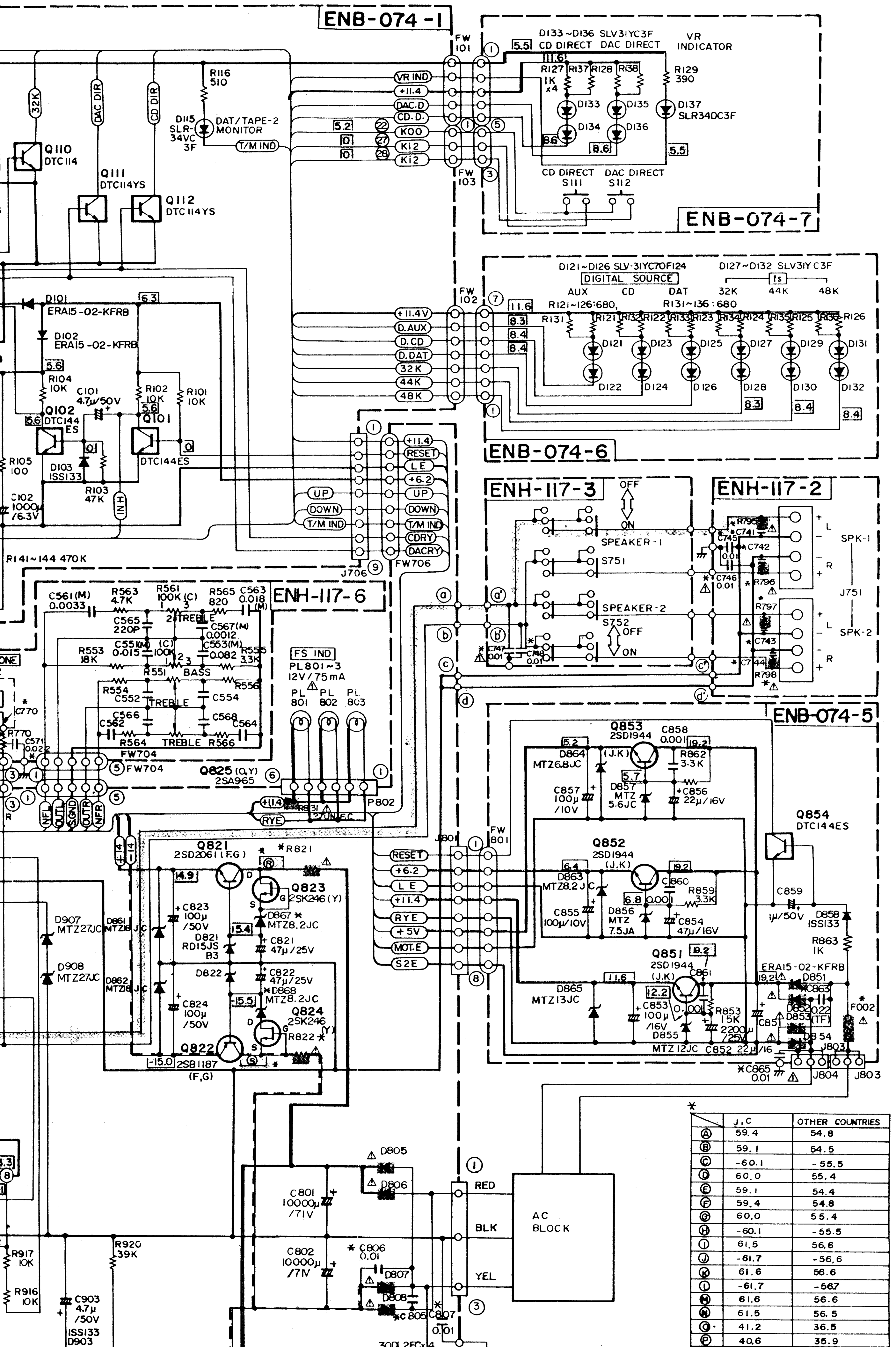
Jvc 482


ENB-074-1
ENB-074-7
ENB-074-6
ENH-117-3
ENH-117-2
ENH-117-6
ENH-117-1
R110~115 390
D109~114 SLR34DC3F
Q105~107 DTC114
D116~118 SLR34YC3F
D133~D136 SLV31YC3F
CD DIRECT
DAC DIRECT
VR INDICATOR
D121~D126 SLV-31YC70F124
D127~D132 SLV31Y C3F
DIGITAL SOURCE
AUX
CD
DAT
32K
44K
48K
IC101
μPC75104CW-115
IC102
GP1U501
RM IND
D108
SLR-34VC3F
SOUND SELECTOR
S101~S114
TAPE-1
PHONO
TUNER
VTR
AUX (A)
AUX (D)
CD (A)
CD (D)
DAT MON (D)
RA101
22K×4
HEAD PHONE
J702
TREBLE
BASS
FS IND
PL801~3
12V/75mA
Q825 (Q,Y)
2SA965
SPEAKER-1
S751
SPEAKER-2
S752
OFF
ON
Q853
2SD1944
Q852
2SD1944
Q851
2SD1944
Q854
DTC144ES
IC751
VC5022-2
IC752
Q709
2SD569A
Q713
2SC3857LF
Q715
2SA1493LF
IC901
μPC1237HA
Q901
2SC2389
Q903
2SA564A
Q904
2SA965
Q902
RY901
Q821
2SD2061
Q822
2SB1187
Q823
2SK246
Q824
2SK246
C801
10000μ
/71V
C802
10000μ
/71V
D805
D806
D807
D808
30DL2FCx4
RED
BLK
YEL
AC BLOCK
J801
J804
FW101
FW102
FW103
FW704
FW705
FW706
J706
P802
FW801

*

	J,C	OTHER CO
Ⓐ	59.4	54.8
Ⓑ	59.1	54.5
Ⓒ	-60.1	-55.5
Ⓓ	60.0	55.4
Ⓔ	59.1	54.4
Ⓕ	59.4	54.8
Ⓖ	60.0	55.4
Ⓗ	-60.1	-55.5
Ⓘ	61.5	56.6
Ⓙ	-61.7	-56.6
Ⓚ	61.6	56.6
Ⓛ	-61.7	-56.7
Ⓜ	61.6	56.6
Ⓝ	61.5	56.5
Ⓞ	41.2	36.5
Ⓟ	40.6	35.9
Ⓠ	21.9	22.1
Ⓡ	60.0	54.9
Ⓢ	-59.8	-54.6

Jvc 482


ENB-074-1
ENB-074-7
ENB-074-6
ENB-074-5
ENH-117-3
ENH-117-2
ENH-117-6
ENH-117-1
D133~D136 SLV31YC3F
CD DIRECT
DAC DIRECT
VR INDICATOR
D137 SLR34DC3F
CD DIRECT S111
DAC DIRECT S112
D121~D126 SLV-31YC70F124
DIGITAL SOURCE
D127~D132 SLV31YC3F
fs
AUX
CD
DAT
32K
44K
48K
R121~126:680,
R131~136:680
VR IND
+11.4
DAC.D
CD.D.
K00
K12
T/M IND
+11.4V
D.AUX
D.CD
D.DAT
RESET
LE
+6.2
UP
DOWN
CDRY
DACRY
J706
FW706
D115 SLR-34VC 3F
DAT/TAPE-2 MONITOR
Q110 DTC114
Q111 DTC114YS
Q112 DTC114YS
D101 ERA15-02-KFRB
D102 ERA15-02-KFRB
Q102 DTC144ES
Q101 DTC144ES
D103 1SS133
R141~144 470K
SPEAKER-1
SPEAKER-2
S751
S752
OFF
ON
SPK-1
SPK-2
J751
FS IND
PL801~3 12V/75mA
Q825 (Q,Y) 2SA965
P802
FW704
BASS
TREBLE
Q853 2SD1944
Q852 2SD1944
Q851 2SD1944
Q854 DTC144ES
D864 MTZ6.8JC
D857 MTZ 5.6JC
D863 MTZ8.2JC
D856 MTZ 7.5JA
D865 MTZ13JC
D855 MTZ12JC
D858 1SS133
ERA15-02-KFRB
F002
J804
J803
Q821 2SD2061 (F.G)
Q822 2SB1187 (F,G)
Q823 2SK246 (Y)
Q824 2SK246 (Y)
D867 MTZ8.2JC
D868 MTZ8.2JC
D821 RD15JS B3
D907 MTZ27JC
D908 MTZ27JC
D861 MTZ18JC
D862 MTZ18JC
D805
D806
D807
D808
30DL2FCx4
C801 10000μ /71V
C802 10000μ /71V
RED
BLK
YEL
AC BLOCK
D903 1SS133

*	J,C	OTHER COUNTRIES
Ⓐ	59.4	54.8
Ⓑ	59.1	54.5
Ⓒ	-60.1	-55.5
Ⓓ	60.0	55.4
Ⓔ	59.1	54.4
Ⓕ	59.4	54.8
Ⓖ	60.0	55.4
Ⓗ	-60.1	-55.5
Ⓘ	61.5	56.6
Ⓙ	-61.7	-56.6
Ⓚ	61.6	56.6
Ⓛ	-61.7	-567
Ⓜ	61.6	56.6
Ⓝ	61.5	56.5
Ⓞ	41.2	36.5
Ⓟ	40.6	35.9
Ⓠ	21.9	22.1
Ⓡ	60.0	54.9
Ⓢ	-59.8	-54.6

(V)